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CONDUCTED BY

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Article I.—*An Eclectic Treatise on the Practice of Medicine.* By R. S. Newton, M.D., Professor of Surgery, and formerly Professor of Theory and Practice in the Eclectic Medical Institute.

So far as our observation has extended, and it has not been very limited, intermittent fever is produced by the action of a humid atmosphere upon feeble constitutions—the humidity preventing a proper cutaneous action; and remittent fever results from a less humid and a highly-heated state of the atmosphere acting upon highly-vital constitutions; hence, in new countries, as we have seen, remittent fever may prevail in the towns, and intermittent in the country where forest and marsh abound. This explains, also, why it is that intermittent fever prevails in the south at the river's edge, and remittent on the top of the bluff, where ponds and marshes do not exist.

From such facts as we have here introduced, it would seem that strong vital force is best adapted to an unexciting atmosphere, and that a feeble one does best in an exciting or electric one. We may further add, that we have always found malignant intermittent to obtain under remittent influences.*

Dr. Joseph Brown (Cy. Prac. Med.), treating of this subject, says: "Remittent is the endemial of warm climates, especially of those of which the soil is marshy; but it is to be met with in the more temperate regions of the earth, and is not unfrequently observed in our own country, especially in seasons of *universal heat*, and in those parts of it where under ordinary temperatures agues are prevalent." This observation, as far as it goes, supports directly the opinions we have advanced.

Dr. Wood says: "Remittent fever has the same types as the intermittent. The most frequent is the quotidian, with a paroxysm occurring at about the same time every day. The tertian, with its every-other-day paroxysm, is not uncommon. The quartan is very rare. Next, perhaps, to the quotidian, is the double tertian, having a daily paroxysm, but that of one day differing from the next, and the alternate paroxysms resembling each other both in character and in time of occurrence."

The phenomena of the forming stage in this form of fever are, in general, such as we have before detailed under the head of "Order I;" but sometimes this period is remarkably brief, for the second or cold stage, as indicated by slight chills, is frequently the first manifestation of the disease. For a time more or less definite, these chills alternate with flashes of heat, until finally the latter acquires an entire ascendancy—the febrile action is fully established, and with a highly increased condition of many of the usual prodromal symptoms; such as, pain in the back, head, and extremities. The pain of acute rheumatism is not more severe than that of the extremities frequently is. The tongue is covered with fur; a jaundiced complexion spreads over the eyes; nausea, which is sometimes attended with a vomiting of bilious matter; the right hypochondriac and epigastric regions labor under a sensation of weight or tension; the urine is scanty and charged with bile; the skin is generally dry and hot; the respiration is oppressed; the pulse is but seldom hard or tense, but generally full and frequent, although not to such an extent as to exceed 116 or 120 beats per minute; the appetite is not gone, but there is usually a loathing of food; thirst is not a constant though a frequent symptom. It is common for the eyes to be suffused and the face flushed.

These symptoms, from having continued from six to eight or ten hours, relax, and the stage of remission commences. About the neck and face some moisture appears, which may or may not extend itself over the whole surface—giving so much relief that the patient soon becomes lost in a quiet and refreshing sleep. All of the febrile symptoms have abated, but a state of apyrexia does not supervene. The duration of the abatement or remission is very indefinite—extending from two to twenty hours, depending upon the existing quotidian or tertian type, as the case may be, when another febrile paroxysm supervenes, commencing in many instances as the previous one did, with chilly sensations, and subsiding in perspiration. This alternation of exacerbation and remission continues, with a gradual increase of the former and diminution of the latter, until the zenith of the disease is attained. But it is proper to remark, that the remission, instead of being attended with perspiration, will frequently give no other evidence of its existence than some abatement of the symptoms.

In mild cases, the tongue is disposed to be moist throughout the disease; but, with the usual violence of the disease, it becomes dry and frequently brown, or even blackish, particularly about the surface. In most cases, the epigastrium becomes particularly tender to pressure; in some instances, gastric oppression is complained of, and in others, a sensation of burning pain which is very distressing. During these symptoms there is apt to be much gastric irritability.

One of the distinguishing symptoms of this form of disease is yellowishness of the skin and of the white of the eyes, and though not always present in the beginning of the malady, it rarely refuses to make its appearance by the fifth day; its tint of color sometimes becomes very intense, even simulating that of yellow fever, and not unfrequently quite uniform over the system; it has even been known, in some instances, to be so secreted upon the surface as to stain white articles coming in contact with it. If bilious diarrhea supervenes, this peculiar secretion of the skin will not be produced.

At the beginning of the disease, nausea and possibly vomiting may be among the symptoms; they are rarely absent, however, when at its height. The ejections are, generally, in the latter case of a yellowish, greenish, grass-green, bluish, or brownish color, and of a bitter taste. The force of the symptoms are not unfrequently reduced by nausea.

The bowels are not always constipated, but that they are, may be assumed as a general fact; and the fecal excretions, though sometimes anti-bilious, are generally the contrary, and probably mixed with some shade of green or black. In the advanced stage, a bilious diarrhea sometimes supervenes, and occasionally it is present at the beginning, and when nausea happens to be present, also, the introduction of the disease has somewhat the appearance of a cholera morbus. As most generally obtains in fever, the urine is small in quantity, high colored and turbid, and in an advanced condition of the disease, it is usually of a brownish color. As might be expected, there is some increase of it during the remissions.

There is, perhaps, no symptom that is more uniformly present than headache, and along with it there is generally one or more of the following symptoms: vertigo, intolerance of light or sound, roaring or singing in the ears, redness of the conjunctiva, flushing of the face, delirium, drowsiness, tetanic spasms, paralytic symptoms, wakefulness, hiccough, etc.

Finally, the reader is not expected to meet, in observations upon this form of disease, with all the symptoms we have enumerated in any case; and he should remember, furthermore, that there is perhaps no other form of fever that presents so many modifications of type, grade, and variety. We have therefore, only attempted to represent that character which may be drawn by generalizing a majority of its visitations.

Dr. Joseph Brown says: "Recovery may be expected if the pulse becomes more full and expansive, the heat more equalized over the surface, the pain of the head and epigastrium less distressing, and if the countenance, though still flushed, loses the purple hue which it previously possessed. A favorable inference may be drawn, too, from the remissions becoming more distinct, the conjunctivæ being less vascular, the bowels more obedient to the action of purgatives, the restoration of a more abundant urinary secretion, and the appearance of bile in the matters vomited. The mean duration of the disease, in cases of recovery is about fourteen days."

Dr. Wood makes the average duration to be about the same period, but very properly adds, that it sometimes terminates as early as the *fifth* or *seventh*, and often about the ninth or eleventh; but sometimes it is protracted to twenty-eight days.

The writer never had a case to extend beyond nine days, and frequently they terminated on the seventh; yet, in the practice of his neighbors, he has known cases to continue twenty-seven days and never less than twenty. He alludes to those cases only to which he was called in consultation that had passed into the typhoid character—which never happened in his practice. He does not believe that the disease has a prescribed course to run. An energetic and proper practice will never suffer a case to run fourteen days.

Remittent fever is considerably modified by the season of the year in which it may appear. When it appears in the spring, it is apt to produce thoracic symptoms of a dangerous character; when in the summer, the brain and the nervous system become the most vulnerable, and in the autumn, the abdominal viscera will suffer the most.

Dr. J. Brown treats of one symptom which, it seems, has been noticed only by Dr. R. Jackson and himself; it is what we would denominate a suicidal monomania, instead of general delirium. It seems to have puzzled him very much, more particularly as *post mortem* examinations revealed nothing! If, in such cases, he had examined the parietal ridge, immediately behind the coronal suture, he would have found that part largely developed. Monomania of any kind, in all febrile cases, depends upon special mental powers in a high state of endowment or excitement. He speaks also of some who, while in the fever, predicted that they would die—and die they always did, but the secret cause and fulfillment of the prediction he could not divine. If he had phrenologically examined them, he would have found a large endowment of caution, and a small one of hope. Even in cases of general delirium, it is not uncommon for some particular idea to predominate. As to the circumstance of their dying, there is nothing strange; but it would be strange for men to recover from under a constantly abiding impression of fear, so common and natural to such an organization, more especially when submitted to, as an inevitable doom.

In the course of this fever, those of its subjects who possess a part so feeble that it can not resist invasion, inflammation is apt to be induced, and upon this circumstance, rather than upon the inherent character of the fever, does its fatality depend. The most vulnerable parts are usually the stomach, the spleen, the lungs and the brain. When inflammation supervenes, the treatment will be found under the head of inflammation of these organs, respectively.

It sometimes happens that this fever presents only a typhous character from the beginning. This may depend upon an inherently feeble constitution, but we are of the opinion that it originates more frequently in those who have become enfeebled by previous disease or vicious habits. Bilious fever of the ordinary character frequently degenerates into the typhous through neglect, but more frequently through mal-practice—the very common anti-phlogistic. When the disease is of this character, the treatment will be found under the head of typhous fever.

It frequently happens that individual parts share a greater portion of the diseased action than others, and that, too, without the existence of inflammation; but it is proper to add, that such local manifestations of disease should render us vigilant lest inflammation should supervene. Upon these local determinations, varieties of this fever have been established; hence we have gastric-bilious fever, hepatic-bilious fever, and upon the same principle we have as many as there are important parts in the system; nevertheless, these local modifications should always command our earliest attention.

Convalescence.—We have but rarely witnessed a case of convalescence which was not more retarded by the mal-practice that had been instituted, than by any pre-existing peculiarity of the fever or of the constitution, and the principal difficulty we always found to be referable to mercury or the lancet. We have known the latter to be used to reduce the fever to an intermitting form—one that essentially depends upon debility. Such practitioners must act upon the principle that it is more easy to remove the system from the disease, than it is to remove the disease from it. In consequence of the use of the lancet and of mercury, the convalescence is not only greatly protracted, but attended with much suffering.

When the case is of a mild grade, the convalescence is rapid and altogether favorable, and such is the case in almost all of its modifications when the treatment has been judicious. The troubles that are usually classed under this head consist frequently of the manifestations of that disease which was instituted to remove the pre-existing one. In originally frail constitutions, this stage may be attended more or less with copious night-sweats, imperfect digestion, constipation, enlarged spleen, and perverted action of the liver.

Causes.—Upon this subject we have perhaps said enough, unless we had something more certainly true than has yet been divulged. The profession generally attribute it to miasma, but many think it may be produced by heat and moisture. In answer to this hypothesis, Dr. Wood inquires why it does not occur among sailors at sea, and in our cities. We answer: At sea, the temperature is never so afflicting, and in our cities, in consequence of its hard, paved, and shaded condition, there is comparatively but little moisture. But, in this matter, all have overlooked an important feature—the electricity evolved by evaporation. One square foot of black, moist, and heated soil will throw off more vapor and evolve more electricity than a square rod at sea or in the city. Here, we are satisfied, lies concealed the secret. Under the head of intermittent fever, we delivered our opinion as to the cause of that and also of this form of fever.

Diagnosis.—When we shall have treated of the two following species, the reader will have but little use for a special treatise on the distinguishing differences between this and other forms; and yet, there is, perhaps, no single symptom, taken separately, that may not occur in other forms of fever. To judge of it at all, we must view it as a whole. The most marked symptoms of this form are: 1st, its paroxysmal character; but this is even more perfectly possessed by the intermittent. 2d. Gastric irritability; this symptom attends this form more habitually than it usually does others, but others sometimes equally manifest it. 3d. Constant pain in the head; this is like the preceding. 4th. Bilious phenomena; although these are more generally present, yet the same is true occasionally in other forms; hence all effort to divide febrile forms of disease into well defined species, must fail. Fever, therefore, is essentially the same in all of its modifications.

Prognosis.—Under this head, we have the same difficulties to contend with. In taking a general view of bilious fever, we are prepared to declare it to be favorable. Under a prompt and judicious treatment, we consider it (all circumstances considered) a less fatal and a more manageable form than the intermittent, simply for the reason, that in it there is more vital force, generally, to contend with the disease. It should never be considered as dangerous, except when it invades a diseased or broken down constitution.

Indications.—In this form of fever, these are very simple, but require an energy which shall be in harmony with the vital force; they consist in equalizing the circulation and the nervous irritability of the system, to remove obstructions and all sources of irritation, and to promote depuration.

TREATMENT.—At the commencement of the febrile stage of this form of fever, or during the first day or two of its attack, one of the best agents that can be given is an emetic, which not only removes the morbid matters accumulated in the stomach, but, by giving a shock to the nervous system generally, causes more or less profuse diaphoresis, mitigating the subsequent severity of the disease, and not unfrequently breaking it up at once.

The emetic operation should be followed by a cathartic, for the purpose of removing congestion of the portal circle, augmenting the secretory action of the liver, and unloading the bowels of fecal and bilious accumulations. To effect this, we know of no better agents than a combination of Podophyllin, Leptandrin and Jalapin, which may be given in doses and at intervals suited to the urgency of the case.

After the action of the cathartic had ceased, should there still remain pain in various parts of the system, nausea, or vomiting, or rapid pulse and high fever, active diaphoresis must be produced and maintained for a few hours. To effect this, the spirit vapor-bath is the best method; and may be given while the patient is in bed; or the Compound Tincture of Virginia Snakeroot may be administered in suitable doses, and repeated at short intervals, until the patient perspires freely The Gelsemin or the Tinct. of Gelseminum may also be used.

If these symptoms, however, should not be present, or only slightly exist, the practitioner may commence at once with anti-periodics, and continue them through the whole course of the disease. The agents of this class and combinations which we prefer, have already been given under the treatment of the preceding forms of fever.

For the determination to the head, which is almost always present in this disease, the same course must be pursued as already named in the treatment of continued fever.

Hiccough may be relieved by Aqua Ammonia, Compound Spirits of Lavender, Musk, or other anti-spasmodics. Restlessness, wakefulness, and similar symptoms may be relieved by Compound Powder of Ipecac, and Opium, Sulphuric Ether, or infusions of Valerian, Scullcap, or Black Cohosh.

Convulsions, which usually take place with children, may be treated by the warm bath, sinapisms to the extremities, and the internal exhibition of a dose or two of the Tincture of Lobelia and Capsicum.

The patient may drink freely of cold water, and the diet should be light and fluid, with proper ventilation of the room and changing of linen. If acidulous draughts are craved, such as lemonade, tamarind water, or currant jelly, apple-sauce, and similar digestible preparations of acid fruits, they should be permitted. During convalescence, the diet must be more nourishing, but strictly of a digestible character.

SPECIES III.—*Congestive Fever—Pernicious Fever—Pernicious Remittent—Pernicious Intermittent.*

Dr. Wood thinks the name "pernicious fever" to be less exceptionable than any other that has been selected to represent this form of fever. This, in the abstract, may be true, but the one we have adopted has become so familiar from long use, particularly to our western and south-western people, to whom this work will be measurably confined, that we prefer it.

If congestive fever was not so signally distinguished in the popular mind from all others, we should have treated of it as a mere variety of the preceding, which, in truth, is the fact. Indeed, we may say that all the forms comprised in this genus are but varieties—modifications, and they should be so considered.

Dr. Wood says, that he does not apply the epithet pernicious to all fatal or dangerous cases of either intermittent or remittent fever, but to those "in which there is great and sudden prostration or depravation of the nervous power, or to use a customary phrase, in which the *innervation* is extremely and most dangerously defective or deranged."

This manner of defining his meaning amounts to about nothing, because it applies with as much justice to those forms of fever which are malignant or pernicious in consequence of a depraved constitution. In such cases, there is prostration—a want of innervation. Our idea of what he intended to define is about this: A pernicious fever is one in which the obstruction exceeds the resisting power of the vital force—one which will readily recover when the force is so aided as to overcome or remove the obstructions. By this state of the system is commonly understood a congestion from the magnitude of the invasion, and not from any previous depravity of the constitution; and one that is entirely independent of any local inflammation.

The importance of this distinction is very considerable, because, in the first, though the present congestion may be relieved, the patient will probably die by reason of constitutional depravity; but, in the second, if it be overcome—if reaction be established, the patient is saved—dissolution and recovery depend, respectively, upon the turning of a single point and this point, to a malignant extent, rarely recurs.

Between this form and the one of malignant fever, there is one striking similitude, it never occurs in a depraved or feeble constitution—but in the strong; and there is also an equally striking difference; the congestive chill is confined to the usually miasmatic season of the year; but this has been known to commence in the spring and to prevail through the winter, though it generally obtains in the same season with the preceding.

It is found to be difficult to state what the type of this fever will be, until after two or three days—the period of doubt and uncertainty to both the patient and physician—that of congestion, or struggle or effort to overcome the obstruction. If this period be survived the type may be intermittent, remittent, or continued. But if the congestive period be procrastinated for two or three days, it may for this time appear as an intermittent or a remittent; and, subsequently, instead of either of these types, it may appear, as before stated, in the continued form.

Observations from various parts of the country seem to have determined, beyond doubt, that there are two leading modifications or varieties of this malady; in one the cerebro-spinal or animal system seems to be almost exclusively invaded; and in the other, the ganglionic. Whatever may be the character of the disease as subsequently developed, it usually begins, as do the miasmatic fevers in general, and betrays no pernicious phenomena until the arrival of the second or third paroxysm; or, as before intimated, at the close of the prodromal stage a highly-congested condition of the system may become manifest.

If the fever is to be of that modification which more especially invades the cerebro-spinal system, the first indication will probably be drowsiness, which will be followed by more or less of stupor. The patient's attention becomes greatly impaired and his memory unfaithful. When asked a question, he may be so far aroused by it as to attempt an answer, but will probably stop before he has concluded, and possibly in the middle of a word.

This cerebral condition may, and not unfrequently does, pass into a complete coma, and from an impossibility to arouse him, he will die in it. The circulation appears labored, and though the pulse indicates fullness, the rapidity is frequently even less than the normal standard; the respiration is stertorous. It is said that epileptic convulsions do sometimes attend this fever, and also tetanic spasms and difficult deglutition.

These symptoms sometimes occur in the first paroxysm, but more frequently they are procrastinated to the second, or even the third. This form is consistent from the start, for though the first paroxysm may be light, yet comatose symptoms will prevail more or less. If the patient shall rally from the first severe paroxysm, which is generally the second, the following intermission will be attended by its usual symptoms; indeed, he may be exempt from all symptoms of disease, and thus go on to recovery; but it is unsafe to indulge, without the greatest precautionary means, such a hope, for most frequently he will continue drowsy and stupid until the next paroxysm, which usually proves fatal.

The *Medical and Surgical Journal* of New Orleans, vol. iii, p. 733, contains an article from Dr. Bowling, of Montgomery, Ala., upon the subject of this fever, as he observed it. He states that the approach of the paroxysm, after a few febrile exacerbations, was attended by spasms which closely resembled an attack of tetanus, that, with exacerbations and remissions of fever, continued with a corresponding degree of violence. He further states, that after the occurrence of the spasm, the patient in no instance lived longer than five days, and most frequently, if not arrested, death supervened at an earlier period. But the disease, as he saw it, differed from its usual character in this: it was attended with some intellectual capacity.

When it invades the ganglionic system, the sight of one patient, in the forming stage, will so impress his general pathognomy upon the memory of the physician that he will never forget it. Language can convey no adequate idea of it. His expression is one of alarm, of horror, and impending dissolution; his features are shrunk, shriveled, and apparently reduced within two thirds of their former compass; his eyes are sunken in their sockets, and the skin is of a bloodless paleness. The extremities and the whole surface are cold, but the patient does not appear to be conscious of it, and a clammy perspiration covers the surface. Sometimes, as an exception to this general coldness, the chest and the abdomen are much heated. The tongue is occasionally pale and cold, and the stomach greatly oppressed; and yet, with these symptoms, the patient complains of an intense internal heat, and of unquenchable thirst.

In many instances, the stomach is particularly irritable, and all ingesta are rejected, and with it sometimes a little bile or muco-serous fluid, and possibly a little blood; and, as in the case of congestive chill, the bowels may labor under a sero-sanguineous hemorrhage, the discharges being frequent and greatly prostrating. The respiration is difficult or labored, being quick and panting; the pulse is feeble, or it may be corded, and so frequent as to number 160 beats per minute. Those who have practiced in the cholera, but have not seen this form of fever, would, upon seeing it, suppose it to be the former—it resembles it in very many particulars. The preceding symptoms, with modifications, may continue two or three days, and unless relieved will terminate in death; or, if not too oppressive, they may be followed by a remission, or even an intermission, when the same symptoms will be repeated with increased and fatal violence when the proper hour is brought about by the revolution of its type.

In a majority of cases, however, these dreadful symptoms may continue but a few hours, before they are replaced by a more favorable set, as returning warmth to the surface and extremities—by a stronger and fuller pulse; in fine, by a regularly-formed hot stage, which as to mildness will be in the ratio of the preceding severity.

Cause.—About this we absolutely know nothing; but a few facts have been observed in relation to it. It has been observed in some places, that when bilious fever prevailed on the table-lands, this form took place or was produced in still lower situations near the river's edge. It has been further observed, that when remittents and intermittents have prevailed, this variety did not.

Dr. Wood is of the opinion that it is a miasmatic fever, but it appears to us rather difficult to reconcile this idea with the prevalence of the disease through the winter, as is sometimes the case.

Nature.—Dr. Wood asks: "What is it that imparts its peculiar character to the pernicious fever? Can it be inflammation?" He appears to come to the conclusion that it is not—and we think this conclusion is very correct. He then asks: "Is congestion the source of danger? I can not think so."

When we consider the cold and shriveled condition of the extremities and surface generally, we can not doubt the presence of congestion even to an alarming extent. We care not whether the danger be attributed to congestion, or to the obstruction, for the removal of which the congestion was the first preparatory step, because, if we equalize the circulation, and thereby re-establish depuration, we shall remove the disease.*

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* In the treatment of this disease, the indications are, very generally, by the Allopathic faculty, properly judged of, but their therapeutics are defective in energy. The writer has witnessed the death of many patients from this and other congestive forms of disease, simply through a want of energy. To melt a pig of iron it is necessary to apply heat, but to expect to melt it in a pile of shavings or straw, would betray a remarkable degree of folly—not more, however, than most physicians manifest with regard to congestive forms of disease. To place around or about the patient a few bottles of hot water, and to administer to him a little toddy and a little Ammonia, is equivalent to melting a pig of iron with straw.

Through a similar want of energy, he has known death to result from coma. Through a fear of public opinion, physicians frequently omit to discharge their own convictions of duty—such men should not practice medicine. An illustration of this may not be out of place. A professional acquaintance of the writer had a case of coma, and after having, with commendable zeal, tried all the means to arouse his patient that had been

TREATMENT.—The most reliable treatment is artificial heat, together with counter-irritation, most energetically adopted. The most active and powerful means must be applied to procure a determination to the surface, and thereby relieve the oppressed condition of the nervous system, as well as the congestion of the internal viscera; for instance, if possible, the warm or vapor-bath may be used, hot foot-bath, sinapisms to the whole surface of the inferior extremities and spinal column, having previously applied powerful, stimulating liniments with considerable friction.

As to internal treatment, Quinine may be administered in very large doses, as soon as possible, without regard to any particular stage or period of the disease; and its administration should be continued, at short intervals, until a decidedly normal impression is effected.

We have found the tincture of Gelseminum given in connection with Quinine, in these cases, to be without a parallel in efficacy; it must be given, however, until its peculiar effects are induced, which may be known by an inability of the patient to raise his eyelids, or muscles generally, although perfectly conscious of all around him; together with a sense of increased temperature of the surface, a return of the skin to its normal condition, and a greater degree of regularity and softness of the pulse. In addition to this, the various preparations of Xanthoxylum, the bayberry and ginger in the form of hot decoctions, may be used freely, and often repeated.

In many instances, diarrhea is present, and the discharges are sometimes hemorrhagic, for which Geranin may be given in large doses in conjunction with the above remedies; but if, on the contrary, there should be constipation, active doses of Podophyllin must be given; and, in either case, as soon as the condition of the patient will permit, a combination of Podophyllin and Leptandrin should be administered, at short intervals, for the purpose of restoring the bilious secretions to their normal standard.

When stupor or coma is present, ice-cold applications must be made to the head, in connection with the above counter-irritating means to the spine and extremities, and stimulating enema may be frequently employed, together with active

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recommended by authorities, but to no effect, he sent for counsel. The consulting physician suggested *actual* cautery to several inches square of the surface on the lumbar region of the spine. The attending physician refused to accede to it, on the ground that the patient would die anyhow, and if such a measure were used, the people would say that they had killed him. The consulting physician then requested the privilege, upon his own responsibility, which, after consultation with the mother, was granted. Hence the cautery, in the shape of a hot shovel, was applied—and the patient saved. In this instance, but for the energy and decision which every physician should possess, the patient would have been lost.

doses of Podophyllin, if the patient can be made to swallow them.

Cold water may be drank freely by the patient, and even in large quantities if craved.

After the disease has been subdued, the treatment during convalescense must be similar to that already recommended in other forms of fever.

SPECIES IV.—*Yellow Fever—Typhus Icterodes—Remitting Yellow Fever—Bulam Fever.*

This is another form of fever which seems to be produced by a longer continuance or some modification of that cause from which the other forms of this genus result. In its individual character it presents many and considerable extremes of variety; so much is this the case, that a physician introduced to it for the first time, would be strongly induced to suspect, in a number of hospital cases, that he had almost as many independent forms of fever to contend with. Although the several patients may have been assailed at the same time, yet no two of them will have the same symptoms, in the same order, or manifested in the same manner. Much of this variety must be referred to inherent differences of constitution; and some of it, no doubt, is referable to the magnitude of the cause of the lesion inflicted.

The prodromal stage or period partakes largely of those peculiarities which attend the other forms of fever. In the period of chill, rigors very rarely obtain, and in some instances there is not even an appreciable sensation of cold or chill—the hot stage being gradually merged out of the incipient, which is greatly distinguished by the severity of the pain in the back and extremities. The stage of excitement is characterized by a dry and hot skin, frequent pulse, a flushed face, red and suffused eyes, and a hurried respiration. The stomach is disturbed by nausea, and possibly by some vomiting, as both are not unfrequent attendants. Deglutition is frequently rendered difficult by the soreness of the fauces, and the tongue wears a white fur in conjunction with considerable moisture. Gastric disturbance is often present from the beginning, but generally it does not appear until after the lapse of twelve or eighteen hours, when it becomes exceedingly troublesome—attended with a sense of burning pain, tension, oppression, and soreness upon pressure—all ingesta are retained, while, singular to remark, its own morbid contents are retained. The bowels, as is common to febrile action, are constipated; flatulence is often troublesome, and the desire for cold drinks is very imperious.

Writers generally inform us that the tongue usually, if not always, wears a pasty coat, but Dr. Gillkrist says, that a perfectly clean tongue is not an unfrequent attendant upon very severe cases. From our acquaintance with fever in general, we are disposed to regard the latter as a more unfavorable symptom than the former. He adds, that the most characteristic symptom of this fever is a pasty tongue, with the tip and edges red. In young and vigorous subjects, the skin may, and often does, have a pungent heat, but we are not to suppose that this is a more dangerous symptom than even a much lower temperature. In the latter case, the skin has a peculiar condition—one that can best be represented by the idea of compression or impaction, which is by no means to be regarded as favorable. The patient is apt to suffer much from his incapacity to obtain rest—he is restless—incessantly tossing his head and limbs about—unable to sleep—he is deeply distressed—draws deep inspirations; in fine, all of his manifestations indicate a state of congestion—one of imperfect reaction.

The nervous symptoms provoked by this fever are surpassed by no other class, in relation to the suffering they produce. The severe pains in the back and extremities with which the affection was introduced, increase and continue even through the stage of excitement; pains in the head and eyes usually attend, are generally severe, and, like the former, continue through this stage, and with it, all of them so increase in violence as to cause the patient to moan and even to scream. The mental functions are frequently deranged; sometimes it amounts only to confusion, but at other times it is manifested by maniacal violence.

As the disease advances, the irritability of the stomach becomes so excessive that it is perfectly useless to attempt to do anything through it in the way of medication. Dr. Gillkrist (Cyc. Prac. Med.) says: "Our experience during two epidemics, one in the West Indies, and of 1828 at Gibralter, by no means bears out the statement of others as to the *bilious* appearance of what is vomited in the progress of this fever; after having paid the closest attention possible to this point, we must, on the contrary, state that with the exception of the black-vomit stage, and at the very commencement of the attack, what is thrown up consists of the ingesta and a glairy fluid. Bile is also usually absent on an inspection of the stools and urine." But he goes on to remark, that it should be remembered that we are treating of a disease which is so much like spasmodic cholera as to furnish exceptions to almost every rule that can be drawn from its diversified manifestations.

Dr. Eberle says, that after the first ejections, bile in abundance is frequently brought up, which varies in color from yellow to dark green, and often of so acid a quality as to excoriate the fauces.

The stage of excitement, with occasional rigors, may vary, says Gillkrist, in its duration from forty-eight to seventy-two hours; the pulse begins to give way, after having, up to this time, been full, rapid, and firm; the eyes lose their brilliancy, and the patient, in most instances, becomes exceedingly feeble —too much so to sit up without aid. The skin becomes cooler and moister, the respiration calm, and the stomach measurably easy; the severity of the headache and other pains have departed, and the patient believes himself to be convalescent, and such may even be the fact; but in the majority of cases the struggle is yet to be encountered.

During this calm, however, we are not without indications of the existing probability. If the worst is yet to be expected, the epigastric tenderness, upon pressure, will be found to have increased, and instead of the flushed face and red conjunctiva, we will find an orange yellow extending from the face to the chest, and possibly it may invade the entire surface; the urine has also a yellowish tinge, though in a deep quantity it may appear brown, and the pulse has fallen below the normal standard. This intermission or remission, as the case may be, may continue only a few hours, or it may continue twenty-four. But, be it long or short, it is succeeded by pain in the stomach and a burning sensation, and to these succeed a most distressing vomiting; the ejections are flocculent, and the desire of cool drinks urgent, and which, as soon as swallowed, are rejected with a force that leaves no doubt as to the extreme irritability of the stomach. These symptoms, having continued from twelve to thirty-six hours, introduce the last or third stage.

The vomiting now becomes almost incessant, and the matter thrown up resembles coffee-grounds suspended in a glairy liquid, which is both dark and ropy; the pulse sinks in force, volume, and frequency; the tongue is dark, approaching black in color; the burning sensation in the stomach is extremely distressing; the extremities are cold and clammy; green or black discharges from the bowels now ensue; and then follow hiccough, hemorrhages, delirium, coma, convulsions, and death.

This is perhaps the most general course of this fever, when fatal; but it must be remembered, that it is frequently still more overwhelming; the patient sometimes falls at the seizure as though felled by a blow; and in some it commences with furious delirium. In such cases, it is common for the disease to terminate fatally at the close of the third day; but even in these cases, dissolution is preceded by an acrid or burning sensation in the stomach and extending to the esophagus. The temperature of the surface and extremities falls rapidly; the features shrink; the urine is absent; distressing singultus comes on, and finally black vomit.

But it is much more common for the disease to be protracted to the fifth, sixth, or seventh day, and sometimes fatal cases are continued to the twelfth or even the fifteenth day. The yellowishness of the skin frequently appears as early as the third day, but more frequently it does not appear until a more advanced period, and in a few instances, not at all. Hemorrhages from the nose, gums, decayed teeth, and every other orifice of the body are apt to appear about the fourth day.

The profession are generally of the opinion at this time that the matter of black vomit consists of coagulated particles of blood suspended in gastric mucus; it is insipid, whereas the black vomit of bilious or typhous fever, when it occurs, is bitter.

CAUSES.—The time has been when this subject was much discussed, but it has measurably passed. During the studentship of the writer, it was strenuously maintained by some to be contagious. Prof. Hossack told the writer that if he would hear him through his course on the subject, he would convince him that it was contagious; he did so attend, but was not convinced. Prof. Caldwell maintained that it was not contagious —and in this we are disposed to believe that he was correct—but he also maintained that it was produced by a peculiar poison, which he denominated malarious or miasmatic. This may be true, but the writer has never believed it. It is, and has been, his opinion that the various forms of fever embraced by this genus result from various combinations of heat, humidity, and electricity; but, however this may be, the weight of the profession has concurred in the opinion that yellow fever is not contagious, and in this we think an important point has been gained.

We do not intend to enter into any discussion of the subject in this place, but will introduce some facts which may possibly aid others to think for themselves upon the subject:

1. Yellow fever does not prevail in the cold season.

2. It does not require a higher temperature than 79° or 80° of Fahrenheit.

3. It is arrested by cold, heavy rains and storms.

4. It appears simultaneously, and is intermixed with bilious remittents.—*Eberle.*

5. Dr. Ramsey states, that during the prevalence of the yellow fever at Charleston, in South Carolina, in the year 1804, "neglected intermittents frequently terminated in yellow fever."—*Eberle.*

6. Dr. Rush also states, in relation to the yellow fever at Philadelphia, in 1802, "Intermittents, the mild remittent, the inflammatory, bilious, and the malignant fever, have, in many instances, all run into each other."—*Eberle.*

ART. II.—*The Fibrin of the Blood.* BY T. L. A. GREVE, M. D.

The true character of fibrin has been for some years past a point of dispute among physiologists, some contending that it is the building material from which the tissues of the body are formed, others classing it with the products of decay to be removed as speedily as possible. The subject has been discussed with great ability and considerable animation, the advocates on either side presenting powerful arguments to substantiate their position. In most of the standard works on physiology however, accessible to the greater number of physicians, it has not received that attention which its importance demands. A rational practice of medicine is based upon a correct understanding of physiology and its coadjutors, anatomy and chemistry; every physician is therefore interested in the elucidation of topics connected with these branches of medical science and the following remarks on fibrin will not be deemed inappropriate.

Fibrin belongs to that class of bodies generally degnated as the protein group, which comprises also albumen and casein. All of these substances were formerly supposed to contain the same organic radical called protein (C 48, H 36, N 6, O 14) and that the difference between them consists merely in the different quantities of sulphur and phosphorus they contain. Although later researches have long ago proved this view to be erroneous, the name of protein bodies has been retained on account of the great similarity which they possess in their general character and composition. They can in many cases be changed from one into the other, either by processes of the chemist, or in nature's laboratory, the living organism.

The true nature of the protein bodies is yet a matter of doubt, and although numerous investigations have fully determined their ultimate composition, the manner in which their elements are arranged, is yet as hypothetical as ever. The cause of this deficiency of our knowledge must be sought principally in the mode in which they occur. They are perhaps never found in their pure state, but generally mixed with other organic or inorganic substances; the skill of the most experienced chemists has hitherto been baffled in their attempt to separate them, owing to the ease with which they undergo changes, and to the absence of those properties which generally enable us to separate different substances from each other as volatility, the power to enter with other bodies into definite and permanent chemical combinations, and the property of presenting themselves in a crystalline form. The constitution of protein bodies is, however, very complex, and it is established almost beyond doubt that they are mixtures of several as yet unknown substances. The names albumen, fibrin, etc., designate therefore only aggregations of certain not yet separated proximate constituents; they must be considered merely as expressions of the sums of certain properties, and can not be used in the sense of strict chemical nomenclature.

Fibrin, in its dissolved state, is but little known, although this is the only form in which we find it in the blood, the chyle, and the lymph. When blood is drawn from an artery or a vein, it assumes in a few minutes a gelatinous consistence, and finally separates into a solid, the crassamentum or clot, and a limpid liquid, the serum. On examination, the clot is found to consist of fibrin, having mixed with it the blood corpuscles. By brisk agitation with a stick, the coagulation is accelerated, and the fibrin separates in shreds, which may be almost entirely freed from adhering globules by washing with water; other extraneous substances may be removed by digestion in alcohol and ether. Thus prepared, it is of a slightly yellowish, opaque appearance, without taste or odor, insoluble in alcohol, ether and water, but soluble in a solution of certain alkaline salts; nitrate of potassa is considered one of its best solvents, producing an albumen-like viscid fluid. The chemical composition of coagulated fibrin is, according to Mulder:

Carbon,	52.7
Hydrogen,	6.9
Nitrogen,	15.4
Oxygen,	23.5
Sulphur,	1.2
Phosphorus,	0.2
	100.0

The same chemist hypothecates for it a rational formula as follows: $(C\,36, H\,25, N\,4, O\,11, 2\,HO) + H\,2\,N\,S + H\,2\,N\,P$. It is, however, to be remembered, that microscopic as well as chemical examinations show it to be a heterogeneous mass, composed of several substances, whose mixture in different proportions may perhaps account for the difference in its nature occasionally observed in disease. We must further not forget, that coagulated fibrin is not identical with the fibrin of the blood, and that investigations of the former are of physiological value only as far as they may aid in determining the nature of the latter. Thus coagulated fibrin is insoluble in serum, the menstruum which held it in solution before it assumed the solid condition. The cause of this rapid change from the soluble to the insoluble form is not well understood; it has been supposed by some physiologists, that the access of oxygen induces this metamorphosis, but although that element accelerates coagulation, its presence is not necessary to its accomplishment. Equally untenable is the view, that fibrin owes its solubility to alkalies with which it is combined, and that the carbonic acid of the air, by decomposing this combination, precipitates the fibrin; it has been found that carbonic acid rather retards than accelerates coagulation. Nothing definite is known on this subject, and we will have to wait for an explanation until further researches shall have thrown more light upon it.

If the process of coagulation is observed through the microscope, small dots or granules are seen to make their appearance, from which, in a short time, delicate threads start in all directions, until the whole mass is converted into a dense network, which continues to contract for several hours, pressing out part of the serum. A coagulum, containing but few corpuscles, will generally contract much firmer than one having a greater number of them, e. g.—in chlorosis, anæmia and other diseases, in which there is a deficiency of red discs, the blood presents a firm clot. Inflammatory blood does not coagulate as rapidly as normal, so that the greater part of the corpuscles sink to the bottom before the separating fibrin can entrap them; the upper stratum is therefore comparatively free from color, and is called the "buffy coat." The clot assumes under these circumstances, a cuplike shape with a raised margin, caused by the greater contraction of the upper part, which in the lower portion is checked by the mechanical obstruction of the corpuscles.

Fibrin forms about 0.22 p. c. of healthy blood, but its amount is subject to great variations; thus, while it is sometimes diminished, it is more frequently increased in quantity especially in inflammatory diseases where it reaches 1, 3 p. c. The blood has been observed to contain more fibrin during a vegetable, than during an animal diet.

In order to determine the origin and the use of fibrin, we may institute a comparison between it and other substances from which it might arise, or to which it might give origin. It is admitted by all physiologists, that albumen is the type of histogenetic material, and that from it all tissues are formed. If we compare the chemical constitution of albumen with that of flesh, hair, chondrine and other tissues, we find that they are all nearly identical and that the principal difference consists in the greater amount of oxygen which the latter substances contain; hence it follows, that the metamorphosis of albumen into the tissues is accomplished by the process of oxiexception is needed in the present instance. The disease to be considered is as purely *arthritis* as any inflammatory difficulty that ever attacked the knee or other articulation. The origin and progress of arthritis are similar in all joints, nor need the results be left out of the comparison. It has been thought that inflammations of the vertebral, hip, and knee articulations arose from a scrofulous or cachectic habit of body, yet there is no more positive evidence of such an origin than there is when the elbow or shoulder joints are attacked with *synovitis* or arthritis. The articulations first mentioned have to sustain more or less pressure in supporting the parts above, while the latter are relieved by the traction produced by the weight of the arm. The muscular contraction is sufficient to effect considerable pressure in either instance, and is to be considered a source of aggravation in every case.

The *etiology*, or cause of hip-disease, is generally not well understood. As asserted just now above, the affection has been supposed to depend upon a scrofulous cachexia. The supposition undoubtedly arose from the prolonged and intractable character of the malady, as well as the general appearance of the patients. I am now fully persuaded, however, from cases coming under my immediate observation, and from the reports of others, that some *injury*, whether particularly noticed at the time or not, is the immediate or remote cause in the majority of instances. I am aware that the great body of the profession entertain other views, claiming in almost every instance that *scrofula—ille morbus incomprehensys*,—is the principal origin of the disease, yet I respectfully beg to differ from them, basing my reasons for so doing, upon well observed cases. I would not be understood as ignoring the influence of a cachectic habit or perverted constitution, in hastening an attack or the establishment of any articular disease, for that would be unreasonable in the extreme. I contend, only, that the cause is oftener traumatic than constitutional. Scrofula is commonly considered hereditary, and too persistent to be ever entirely eradicated from the system; yet it does not appear either from those who have suffered from hip-disease, or from their progeny, that they are much more scrofulous than others. Occasionally a child having a parent who has suffered with hip-joint disease, will be attacked with the same disorder, in which case there may have been some degree of predisposition depending upon constitutional cachexia; such isolated instances, however, prove very little, as it is no uncommon thing for parents descended from healthy progenitors, and having several sound children, to have one among them that suffers from morbus coxarius, notwithstanding the Horatian maxim, "*fortes creantur fortibus*." It only remains to be said, that when hip-disease occurs in a scrofulous subject, the complication renders the case more intractable.

Symptoms.—The early symptoms of hip-disease are often not severe, and pass for neuralgia or rheumatism. The first that may attract the child's attention, or of which he may complain, will be pain in the hip and knee-joints or the parts adjacent to these articulations. This will generally be noticed after violent exercise, or too long exposure to the chilling influences of air and water. The patient manifests aversion to exercise, preferring repose, though usually of an active disposition. Days or weeks may be passed in this way, without evidence of much amelioration or aggravation of the case. At length the disease assumes a graver aspect, much distress in the limb being experienced. The pain is frequently more severe at the knee than at the hip, therefore it is occasionally difficult to convince a patient that the seat of the disease is not in the knee. The illusion arises from the peculiar distribution of the obturator and anterior crural nerves. The former has filaments distributed to the synovial membranes of the hip and knee-joints; and the latter to the same and proximate structures, as well as to the integuments on the inside and front of the knee This exemplifies the repeated observation, that when disease affects one set of terminal branches of a particular nerve, the pain is often referred to the extremities of other branches given off by the same nerve. The illusion is still made more complete in hip-joint disease, by the tenderness on pressure at the knee, which is wholly due to sympathetic pain. The above symptoms will not have existed a great length of time before the nates become flattened by wasting of the glutii muscles. The attenuation seems to be due to morbid reflex nervous action, the effects of which may be seen in wry-neck, talipes, and various other affections. The pelvis now begins to be distorted from the patient standing on the sound limb, which raises up that side, and depresses the other, giving the lame leg the appearance of being longer than the other. In rare instances, however, the patient draws up the pelvis on the diseased side, to enable him to steady the weight of the body on the other limb, making the unsound limb apparently the shortest. The distortion of the pelvis produces a slight lateral curvature of the spine, with elevation of one shoulder, which exists in almost all subjects who have suffered with morbus coxarius in early life.

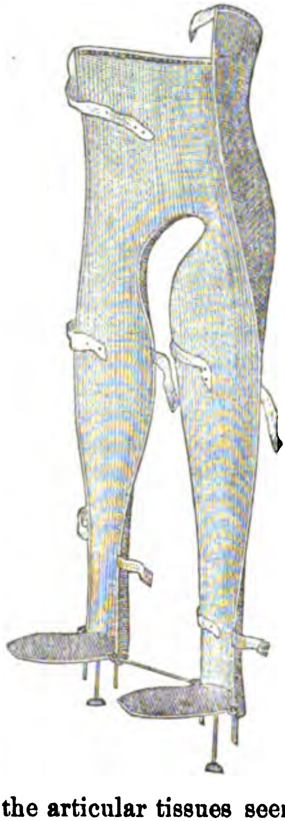
In the *second* stage of the disease, which is distinguished from the first only by being more advanced,—the pain is increased, especially at the knee, and the parts about the hip have become more intolerant of pressure. Pain is much aggravated, too, by concussion produced by striking the trochanter, the knee, or the sole of the foot. Also by taking hold of stage of the disease, the capsular ligament has become excessively distended, or may have even burst, allowing its fluid contents to escape into the areolar spaces about the articulation. It is at this time that distinct fluctuation can be detected, though a true abscess which is common in the third stage of the disease, has not yet formed. Plastic lymph is exuded among the structures which mechanically impedes the action of the muscles, and by pressure upon the nerves distributed to the parts below, interferes with the normal position of the limb.

If the fluid which distends the capsular ligament, or the super-imposed tissues after the capsule has yielded, does not find timely escape, it will do much toward disorganizing the structures to which it is confined, almost surely terminating in abscess. During the progress of the disease much lymph will become organized into false bands, and blend together the various tissues, thereby greatly interfering with the mobility of the joint. When abscesses form, in time their walls will collapse and degenerate into sinuses, around which every structure seems to become involved, until nothing like natural motion can be attained. As the disease progresses in the joint, the articular cartilages take on ulceration, and finally the bones themselves. The pressure, produced by the ordinary muscular contraction, of the head of the femur upon the upper part of the acetabular walls, the parts coming in contact being unprotected by the usual articular material, causes absorption of the hard structures, and a consequent displacement. In some rare instances the displacement amounts to a dislocation, yet in almost every case there is no luxation, as has been pretty conclusively proved by the late Prof. Rust of Germany, and Prof. March of Albany, N. Y. Although the Sweets and their followers, still go about the country *reducing* (?) femurs that are only apparently dislocated, no surgeon of the least professional standing, of the present day, allows himself to be so far governed by appearances, as to attempt a systematic reduction upon a limb that has been distorted by an ordinary case of hip-joint disease. Many surgeons, in the United States at least, have not been willing to accede to the views of Rust and March, but have laid hands on every specimen within reach,—and there is no lack of them,—to see if the new doctrine, which was so fast gaining ground in regard to "spontaneous dislocation," could not be controverted. Among the most diligent of these has been Prof. Henry H. Smith of Philadelphia, who claims to have four specimens in his cabinet which bear "evidence of the presence of luxation." Several specimens are in existence, which are adduced to show that dislocation may take place during the progress of hip-disease. Such may reasonably be the case, if violence, in addition to the tendency of the affection, be admitted to have any share in the matter. Frequently a sound femur is luxated, and remains so ever afterward. If a diseased one then, should suffer dislocation, and continue in this state, it would be in no way incompatible with a right understanding of this pathological point.

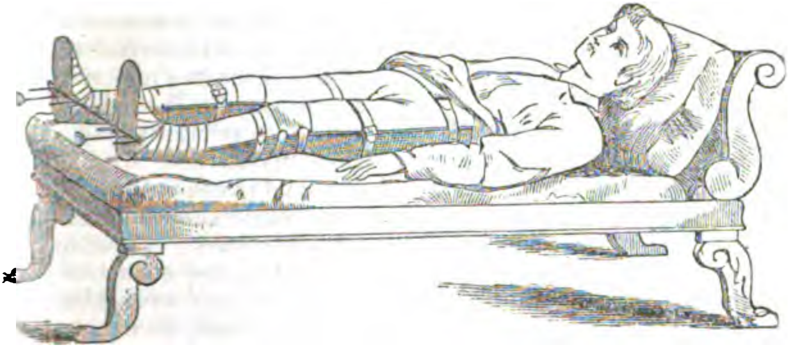
Prognosis.—The prognosis in hip-disease has hitherto been considered decidedly unfavorable, both on account of the danger of the disease, and the length of time consumed in the treatment, to say nothing of its imperfect results. The patient, then, or his friends should be made aware of the uncertain consequences, even in a case that presented many favorable symptoms. Few cases undertaken in the advanced stages of the malady ever recover without some deformity. or partial anchylosis. Under the old plan of treatment, a complete recovery was considered extraordinary; recent discovery in regard to the pathology of the disease, and improvements in the manner of managing the patient, have done much to modify the results obtained.

Diagnosis.—The history of the case, considering the symptoms as already detailed, will generally be sufficient to establish a correct diagnosis. Neuralgia and rheumatism have been mistaken for the disease, yet if the case be carefully studied, testing the sensitiveness of the articulation by concussion, and estimating the causes of the peculiar position assumed by the limb and pelvis, no failure can be made in coming to a proper understanding of the complaint. Those who have little experience with hip-disease may for a time be misled by an acute abscess in the vicinity of the joint, yet little harm could result from such an error. beyond the distressing apprehensions unnecessarily created in the mind of the patient or his friends. In very rare instances, a separation of the head of the femur from the neck of the bone, either by fracture or simple diastasis, has been mistaken for morbus coxarius.

Treatment.—In regard to the best plan of treatment for hip-disease, there is among surgeons much difference of opinion. Not a few of those who claim to be particularly progressive in their ideas, say that patients laboring under the affection in question, should be driven on crutches into the open air, declaring that their only hope was in food and exercise. That sounds very well, and the course is particularly agreeable to those who know nothing of the disease, except that it is unpleasant to treat, and rarely terminates in perfect recovery. But there is a "best" plan of treatment for this affection, and that must be based upon sound pathological views. To send a patient into the street on crutches, when he ought to have his limb quiet and under the influence of extension and counter-extension, to overcome the pressure upon inflamed surfaces, is a highly censurable and summary manner of disposing of a case. Occasionally a patient will recover while crutching about with the greatest freedom, yet where one recovers, ten are at length brought to the bed from which they never rise. Hip-disease is more local than constitutional, and must be treated accordingly. In the early stages of the disease powerful anodynes should be applied to the region over the joint, to prevent the affection from making progress, and to give the irritated nerves an opportunity to rest. Pain of a long continued and severe character will wear out any patient. To overcome the distortion that has already taken place in the pelvis, an apparatus like the one represented in the diagram should be used. It is made of woven wire, having its border bent over and soldered to give it firmness. The material should be of sufficient firmness to prevent it from warping, and accommodating itself to the deformity of the body. It is shaped like the posterior half of a pair of pants; and on that account has been facetiously styled the "wire breeches." Two movable foot-pieces are connected with the leg parts, to which the feet of the patient are to be lashed, and extension made upon them by means of thumb-screws. The counter-extension is principally made upon the tubera ischii and the parts against which the upper end of the "breeches" rest. A space is left at the bifurcation of the apparatus, to allow fecal evacuation, without disturbing the position of the patient. Before the instrument is applied it is to be well lined with soft cloth or batting. It is essential that the apparatus be well fitted to the patient. A plaster of aconite, or of the extract of belladonna, should be kept next to the skin, covering the affected joint. In case the fluctuation is pretty distinct, and the articular tissues seem to be distended with fluid, a slender trocar and canula may be used to evacuate the parts.



The use of the evacuating instrument every few days, until there is a subsidence of the fluid accumulation, is decidedly serviceable. When the trocar is inserted the surgeon should consider the position of the large vessels and nerves that they may escape a lesion. The usual place to make the puncture is a little above and posterior to the great trochanter. Instead of a trocar, a slender bistoury, or tenotome may be employed to make an opening into the joint. Using either instrument the capsular ligament must be punctured, when it has not already been perforated by the morbid processes. After the puncture has been made, the limb may be rotated, especially inwards, to force out the fluid. This having been well done, and the wound covered with the belladonna or aconite plaster to prevent the air from freely passing into the articulation, and keep in check any inflammation that might be excited by the paracentesis, an anæsthetic should be used to obviate the pain. The operation having been performed, the patient is to be replaced in the wire apparatus and retained there constantly until another tapping of the joint is required, or recovery is so far advanced as to render it safe to exercise the limb a little. Under the influence of such local treatment, and the internal exhibition of stimulants, anodynes, arterial sedatives, or tonics, as the symptoms of the case require, the patient will steadily improve. The slight shortening of the limb which is likely to result in many cases, even with a favorable termination, may be remedied by the use of a shoe which has a correspondingly high heel. The stiffness of the limb, which is caused in part by the organization of plastic lymph among the tissues in the vicinity of the joint, and sometimes within the capsular ligament, is in many cases to be let alone, at least until it be ascertained whether the motion of walking diminishes the difficulty. If it do not improve by use, and false bands seem to be the entire impediment, the patient is to be prepared by anæsthesia, and then the limb flexed, extended, abducted, and rotated with sufficient force, of a sudden character, to break up the fibrous adhesions. The patient should then be put in the wire breeches, where he is to remain until all active inflammation has subsided. Passive motion is to be practiced for a few days preceding attempts at walking. So great advantage has been derived in such cases from the rough manipulations of "natural bone-



setters," in their unscientific endeavors, that the notion is quite prevalent that the reduction of an old dislocation has been effected.

When a very bad case of hip-joint disease is presented for treatment in its advanced stages, several fistulous openings existing, which discharge the products of caries, the patient rapidly sinking in spite of the best management that can be devised, *re-section* is the alternative. This severe and dangerous operation should not be resorted to, however, until the internal use of cod liver oil and the phosphates have been thoroughly tried, as well as such supporting treatment as the peculiar symptoms of the case demand.

The old plan of using leeches and other depleting means, and counter-irritants in the form of plasters, moxas, setons, and cauteries, is falling into merited disrepute. When a derivative agency is used, the common irritating plaster is, in a majority of instances, the best, but it has its objections. The actual cautery has been highly extolled, yet it is an unmerciful agency, and often fails to produce any satisfactory result.

The long splint, reaching from the axilla to beyond the bottom of the foot, has been employed in connection with extension and counter-extension, with very happy results. A double splint, a piece to go on each side of the body, and connected by a cross piece at the lower end, answers a very admirable purpose. With this the same mechanical principles can be brought to bear, that render the wire apparatus so valuable. The latter, however, is easier to be worn, the counter-extension being so well distributed upon those parts which are used to pressure in sitting.

Before dismissing this subject, it may be well to mention that a patient should not be declared well, and discharged, too early. The tendency to a return or continuation of the disease often exists, sometimes after apparent convalescence. The second attack in time subsides, with as much probability of a third, as there was for the preceding. I know a young man who has been through three or four attacks, two or three years coming between each, the patient and the medical attendant congratulating themselves as many times upon the prospect of recovery. This tendency to relapse seems to be favored by a scrofulous condition of the tissues about the joint. In one case, where a third attack threatened, severe symptoms were obviated by the administration of chalybeates, and large doses of the phosphate of lime, together with the arnica plaster applied to the parts covering the articulation. It is essential that the patient's bowels be kept open with laxatives, both during the cure, and afterward, as a preventive of a subsequent attack of the disease.

ART. IV.—*Ulmus Fulva and Datura Stramonium—In Burns.* By N. C. PARRISH.

Although some of our most eminent medical authors have recommended the employment of the above named medical agents, as external applications in burns, our practitioners undoubtedly do not place that high estimate upon them that their merits justly demand. Physicians who have employed them as remedies in burns, regard them as far superior to any others that have as yet been recommended.

With many physicians, "white paint," or "wheat flour," is regarded as *the* remedy; yet I feel confident that if they should once employ Ulmus Fulva and Stramonium, they would at once abandon the use of these other agents, or else place them upon the "*defective* list," where they legitimately belong. I have not time nor space to present all the objections that might justly be urged against the use of these agents in burns during the suppurative stage, at which period they are employed. Suffice to say, the absorption of pus when either one is employed, and liability to absorption of the active principle of the carbonate of lead, when white paint is used, is evidence sufficient to my mind to prove their inefficiency in these cases. The principal indications in the treatment of burns are to allay irritation, and shield the parts from the action of the air. To fulfill these indications, nothing seems so well adapted as a cataplasm of Ulmus Fulva (pulv.). It fills both of these indications simultaneously, and in the whole category of emollient cataplasms there are none better adapted to the suppurating surface. As an absorbent, it is inferior to no other cataplasm.

When the suppurative stage has ceased, and the swelling principally subsided, an anodyne-discutient is indicated, and the Unguentum Stramonii fills this indication most satisfactorily. To prove that this treatment is not a mere theory on my part, I beg leave to give the history of a case of burn which recently occurred in my practice. Mr. H—, aged thirty years, was replenishing a fluid lamp while the tubes were unextinguished, and as a natural result of such carelessness, an explosion occurred, igniting his garments and enveloping him in flames. They were soon extinguished, however, and his friends immediately applied "linseed oil and cotton." It was about eight hours after the accident that I arrived, and found the patient suffering most intensely. I removed the "cotton" and proceeded to an examination of the injured parts. The injuries were found to extend from the ends of the fingers of the left hand, to the lobe of the ear on the same side, including the left half of the throat and breast. Throughout nearly the whole extent, the parts were divested of the entire derma. In several places the injuries were very deep. I applied a cataplasm composed as follows:—Ulmus fulva (pulv.), and a strong infusion of hops, q. s. This was applied about one inch think, over the entire surface; this I removed daily. On the second day, however, to render the application more antiseptic, I added to the cataplasm of whisky and molasses, q. s., and applied as before. At the eighth day the suppuration ceased, and the swelling had almost entirely subsided. An anodyne discutient seemed to be indicated at this stage, and to fill which, I applied the Unguentum Stramonii. This also was renewed daily. The parts healed rapidly, and the patient was "discharged *cured*" in fifteen days from the time he was burnt. The constitutional treatment during the entire course consisted of occasionally small portions of Morphia Sulph. and Nitrate of Potassa in solution, q. s., to produce the necessary diaphorósis, diurésis, and catharsis.

PART SECOND.

SELECTIONS.

On Some Points in the Treatment and Clinical History of Asthma. By Hyde Salter, M. D., F. R. S., Assistant Physician to Charing Cross Hospital.

Treatment of Asthma by Stimulants.—Theory of the Modus Operandi of Stimulants.—Illustrated by Coffee.—Curative Influence of Violent Emotion.—Its Action analogous to that of Stimulants: Acts also as a "Nervous Derivative."—Cases.

One of the commonest and best reputed remedies of asthma, one that is almost sure to have been tried in any case that may come under our observation, and one that in many cases is more efficacious than any other, is strong coffee. To the question, "Have you tried strong coffee?" the asthmatic is pretty sure to answer, yes; and is also pretty sure to add that it gives him relief.

About the *modus operandi* of this remedy I was long puzzled; I could not make it out; and it is only lately that I think I have stumbled upon it. The *rationale* of its efficacy is, I think, to be found, on the one hand, in the physiological effects of coffee—the particular nervous condition that it produces—and, on the other, in a feature in the clinical history of asthma which I have long observed, and of which I think the efficacy of coffee is highly corroborative.

This fact is, that *sleep favors asthma*—that spasm of the bronchial tubes is more prone to occur during the insensibility and lethargy of sleep than during the waking hours, when the senses and the will are active. I have already referred to this in my observations on the "Clinical History of Asthma," in explaining why the paroxysm invariably (or almost invariably) chooses the hours of mid-sleep for its onset. Let me just refer to this subject again; for it is both interesting and important, as it explains a curious and very constant phenomenon in asthma—the hour, namely, of the attack—is highly illustrative of its pathology, and furnishes the key to some of its treatment.

I think, then, that sleep favors the development of asthma in two ways—

1. By producing insensibility to respiratory arrears.
2. By exalting reflex action.

The way in which sleep favors the development of asthma, by producing insensibility to respiratory arrears, and exalting reflex nervous action, I have already sufficiently explained in the papers on the Clinical History of Asthma to which I have referred.

There can be no doubt that sleep *doe* exalt reflex nervous action. It is a fact so abundantly inculcated by the history of disease as hardly to require illustration or proof. The phenomena of epilepsy, cramp, lead tremors, and other examples of deranged muscular action, all teach it. It is just as sleep comes on, just as the will is laid to rest, or during sleep, that these different forms of involuntry muscular contraction most commonly occur. Any one, to convince himself of it, has only to fall asleep sitting on the edge of his chair, in such a position that it shall press on his sciatic nerves. As long as he is awake his legs will be motionless; but the moment he falls asleep they will start up with a plunge and suddenly wake him. As soon as he is awake they are quiet and still again, with no disposition to start, till he again falls asleep, and that moment they start again and wake him; and so he may go on as long as he likes. He changes his position, sits back in his chair, and they start no more. I need not explain what so clearly explains itself. I heard, some years ago, of a case of what might be called chronic traumatic tetanus, in which the source of irritation—the excito-motory stimulant—was extensive disease of the hip-joint. The moment the patient fell asleep he was seized with opisthotonos, which, of course, immediately woke him. On awakening, the tetanus vanished; on again falling asleep, it re-appeared; and this alternation of falling asleep and waking continued for weeks, if not for mouths, the patient getting no continuous rest, till he was quite worn out. As long as he was broad awake the tetanus never appeared. Hosts of similar facts, illustrative of the same truth, might be cited.

Anything that exalts reflex nervous action increases, of course, the potency of reflex stimuli. Now, I have elsewhere endeavored to show that the phenomena of asthma are, in almost every case, those of excito-motory action, and that the exciting causes of asthma are, in the great majority of instances, such as act by a reflex circuit. They would, therefore, on the asthmatic's falling asleep, immediately acquire a potency they did not before possess, just as the pressure on the sciatic nerve did, in the illustration I have given. Thus it is we see that the asthmatic may gorge himself with unwholesomes, and yet, as long as he keeps himself awake, suffer no consequential asthma; the irritant is there, the undigested food is in the stomach, but as long as he is awake, as long as the will is dominant, it is inadequate to the production of reflex phenomena. But let him fall asleep, and in an hour or two the paroxysm will be established.

And not only will *sound sleep* determine, by this exaltation of reflex susceptibility, the production of asthma by its exciting causes, but a small dose of the same condition—sleepiness, drowsiness—will favor the supervention of asthma in a proportionate degree. Not only is drowsiness a premonitory sign of an attack, but a powerful predisposer to it; and the asthmatic knows that he yields to it at his peril. I have often noticed in asthmatics that the sleepiness that is so apt to come on after dinner, will be accompanied by a slight asthmatic oppression and wheezing: as the drowsiness deepens, so does the asthma, and in this way it may settle down into an attack; but if the patient rouses himself, or if anything occurs to engross his attention so as to wake him up, broad awake, the asthma quickly vanishes. It is in this way, I think, that is to be explained the fact, that asthmatics can dine out late and unwholesomely with impunity; while, if they dine at the same time and in the same way at home, asthma is sure to come on. At home they want that excitement which at a dinner party keeps the animal functions in a state of exaltation and the mind vividly awake, and effectually banishes the least approach to drowsiness. Of the fact there is not the slightest doubt. I know an asthmatic who can with impunity dine out at seven o'clock, as dinner-eaters of the nineteenth century are apt to dine—shirk nothing from soup to coffee—walk home at ten o'clock, a distance perhaps of four miles, with the wind of a deer-stalker—go straight to bed, and get up the next morning scathless; but if he were to dine at home at six, or even at five o'clock, he would be wheezing at nine, and by four the next morning downright asthmatic.

I believe a certain amount of the curative influence of fright, or other strong mental emotion, is to be explained in the same way.

"But why," it may be asked, "all this roundabout digression? What has all this to do with the curative influence of coffee?" I believe it is simply its explanation. For, what are the physiological effects of coffee? They consist in the production of a state of mental activity and vivacity, of acuteness of perception and energy of volition, well known to those who have experienced it, and to a certain extent very pleasurable, and which is the very reverse of that abeyance of will and perception which, in drowsiness or sleep, so favors the development of asthma. In sleep, will and sense are suspended; after taking strong coffee, they are not only active, but exalted. It produces rapidity of thought, vivacity of spirits, clearness of apprehension, increases tenfold the working powers, and altogether intensifies mental processes. Not only is there no disposition to sleep, but sleep is impossible: the thoughts hurry one another through the mind; the bodily movements are energetic and rapid; and if the effects of the drug are pushed far, a very unpleasant condition is produced, something like that of delirium tremens, *minus* its hallucinations. Now, if the suspension of the will, or its depression, favors the production of excito-motory phenomena, and thus favors the development of asthma, is it unreasonable to suppose that its exaltation should prevent or cure it? It *must* do so—if not positively, at least negatively, by removing the predisposing condition. And bearing in mind this marked physiological effect of coffee—that this exaltation of the animal nervous functions is exactly what it produces—it certainly does seem to me reasonable to suppose that this is its *modus operandi*. And if of coffee, then of strong tea, and alcohol, and ammonia, and ether, and other stimulants of undoubted value in asthma.

To show that this is the *rationale* of the cure of asthma by stimulants, I do not think it is necessary to show that it is only when the asthmatic is drowsy, or has been sleeping, that they do good. If anything that rouses the asthmatic to a state of wakefulness will put a stop to asthma that was creeping on him while he was sleeping or sleepy, *a fortiori* anything that carries him beyond a state of mere wakefulness—that gives him an active, not a mere passive wakefulness, will be still more efficacious, and will be adequate to the checking of an attack that, in spite of his being broad awake, was gaining on him.

The very frequency with which coffee gives relief, makes it hardly worth while for me to narrate the history of any cases. I should think, from my own experience, that coffee relieves asthma in two-thirds of the cases in which it is tried. The relief is very unequal, often merely temporary, and sometimes very slight; sometimes it is complete and permanent. It is often taken in the morning; and patients will tell you, that previous to taking their coffee they are not fit for anything, can hardly move about; but that taking it is immediately followed by freedom of breathing, and an ability to enter at once on their daily occupations.

There are two or three practical hints with regard to the administration of coffee, that are worth bearing in mind.

1. It can not be given too strong. Unless sufficiently strong to produce its characteristic physiological effects, it does no good—but rather harm; moreover, if given very strong it need not be given in much bulk, and quantity is a disadvantage—its effect is less rapid, and it oppressively distends the stomach.

2. I think it is best given without sugar and milk—pure *cafe noir.*

3. It should be given on an empty stomach; if given on a full stomach it often does great harm, by putting a stop to the process of digestion; indeed, so much is this the case, that I consider coffee accompanying a meal, especially late in the day, so peculiarly apt to induce asthma, that it deserves to be classed among its special provocatives. I have mentioned elsewhere the case of an individual who never dared to take the usual after-dinner cup of coffee—it would make the simplest dinner disagree with him. But the same asthmatic found in strong coffee, on an *empty stomach*, one of his most valuable remedies.

4. For some reason or other, I don't know why, it seems to act better if given hot—very hot.

I adverted just now to the influence of mental emotion on asthma, and stated my belief that its *modus operandi* was, like that of coffee and other stimulants, by producing an exaltation of sense and will—an intense activity of the intellectual part of nervous action—and proportionately lessening the tendency to excito-motion; and this it does to a much greater degree than stimulant remedies, and its effects are, therefore, proportionately more sudden and complete. It was, indeed, the curative influence of violent emotion, and the observation that it and coffee-taking alike banish that condition in which asthma is most prone to come on, that first suggested to my mind the theory of the action of stimulants on asthma that I have just endeavored to propound. I think, too, that mental emotion acts, if I may so express it, as a nervous derivative. There are many phenomena, both in health and disease, that seem to show that only a certain amount of nervous activity can be in operation at a certain time; and that, if a nervous action of one kind comes operation, another that had been previously going on is immediately depressed or arrested. Such is the explanation of the well-known experiment of the two dogs, one of which was taken hunting immediately after a meal, while the other was allowed to sleep. In the one that was taken hunting, digestion, on its return, was found hardly commenced; in the other, it was completely over, and the stomach empty. In the sleeping dog the whole vital dynamics, not being otherwise employed, were appropriated by the function of digestion; while in the hunted dog they were entirely taken up by its energetic locomotion, and drafted away, as it were, from that nervous superintendence of digestion without which the function can not be carried on. The power of strong emotion, or hard study, in retarding digestion, is an analogous fact. Just in the same way, I think, the extraordinary activity and exaltation of thought and perception, that characterize the state of mind that the taking of coffee, ether, and other stimulants produces, acts as a nervous derivative in asthma, and diverts from the nervous system of the lungs that morbid activity which engenders the spasm of the bronchial tubes.

The cure of asthma by violent emotion is more sudden and complete than by any other remedy whatever; indeed, I know few things more striking and curious in the whole history of therapeutics. The remedy stands next in speed and efficacy—tobacco pushed to collapse—takes time, a few minutes at least: but the cure of asthma by sudden alarm takes *no* time; it is instantaneous, the intensest paroxysm ceases on the instant. This is a fact so little known, as far as I can see, and yet so practically important and theoretically interesting, that I think it will not be unprofitable if I endeavor to impress it more deeply by the narration of some cases of its occurrence.

Case I.—A gentleman suffering an unusually severe attack, so bad that he had been unable to speak or move all day, was suddenly alarmed by the illness of a relative: he ran down two flights of stairs and up again, and administered the restoratives he had procured, and then observed, to his astonishment, that his asthma was gone. This gentleman tells me, that on many other occasions different forms of mental emotion have cured his asthma.

Case II.—C. R., a confirmed asthmatic, states that, when he was suffering from an unusually severe attack, a fire occurred just opposite his house. Previous to the occurrence of the fire he was in bed, breathing with the greatest difficulty, and unable to move. When the excitement of the fire was over, he found that he had been standing in his night-shirt, looking, with the rest, out of the window, and that he had quite forgotten all about his asthma. His breath was not quite well the rest of the day, but nearly. On another occasion, when he was suffering from an attack, some sudden anxiety arose about two of the members of his family being out late: the alarm from which he suffered relieved his asthma, but not so suddenly as in the case of the fire. On another occasion, a sister of his was seized with sudden illness that seemed to threaten suffocation: he was suffering severely from asthma at the time, and was in bed; he jumped out of bed in great alarm, and found then that his asthma was perfectly cured. He was sufficiently well to run for a doctor, and continued well throughout the day.

Case III.—Not long ago I was informed by a patient at the hospital, who had suffered greatly for many years, that however severe an attack might be, venereal excitement would almost invariably cure it. He told me also, that, when a youth, he had been guilty of the practice of onanism, and that the unnatural excitement thereby produced had just the same curative effect on his asthma. Indeed, he pleaded this effect of it as a sort of excuse for the practice; and assured me that when his breath was very bad at night he used to resort to it for the purpose of curing it. I have known two or three cases in which sexual excitement has had just the same effect.

Case IV.—The following account of the curative influence of mental excitement I have received from a medical friend, who has suffered from asthma all his life:—"On one occasion I was sitting with fixed elbows on a sofa, breathing hard: a lady came into the room whom I had known very well, and whom I had not seen for several years. I got up to receive her, and sat down again on a music-stool; with no especial purchase, therefore, for the respiratory muscles, and yet with comparative ease of breathing. This ease lasted for about an hour, and then the difficulty of breathing came on again. I attribute the the temporary amendment to the diversion of nervous energy. Just the same thing has happened to me more than once. On another occasion I was suffering a good deal at a farm-house. I got on horseback with some difficulty, and an anxious hope that the horse would go quietly, to fetch myself an emetic from a town three miles off. The horse ran away with me. I pulled in, at first weakly and almost despairingly, but the need of exertion brought the power: after a run of about a mile I succeeded in pulling up, and was delighted to find my asthma gone. Another time I was breathing very hard, and a friend engaged me in an argument. At first I could only get out a sentence in successive gasps; but gradually, as I got excited, the hard breathing went off, and I could talk fluently."

From the foregoing observations, then, I think we may conclude—

That, since the abeyance of the will favors, in proportion to the degree of that abeyance, the development of asthma, and since the effect of strong coffee is to dispel such suspension or depression of volition, and restore the will to its wonted (or even an unwonted) activity, it is by thus exalting the will, and so disfavoring the development of excito-motory action, that this remedy relieves asthma.

That the same interpretation applies to the relief of asthma by all other stimulants whatever.

That thus strong coffee and mental excitement, although apparently so different, belong to the same category of remedies for asthma.

Case of Hydatids. By John T. Temple, M. D., St. Louis, Mo.

To the physician, who has, for thirty-five years, listened to the teachings of nature in her normal as well as morbid conditions, there are many lessons which at the same time make deep impressions, and excite an earnest desire to look into her secret and mysterious workings. Apparent deviations from her own laws occasionally arrest our attention, and draw us from the contemplation of her generally uniform harmony of action, to the consideration of these deviations. And thus too often the mind is led from the material into the fanciful and fascinating domain of theory.

Even morbid action sometimes becomes erratic and inexplicable. To the speculative, the case which follows may afford a theme for some interesting article in this Review.

On the first of April last I was summoned in great haste to Mrs. Herbert, who had been in labor two days, attended by a midwife. She was flooding fearfully. The midwife had become alarmed and fled. On examination I found a soft mass filling the uterus, but no fœtus. I immediately extracted the mass, which proved to be hydatids, which filled a half gallon jar. The breasts were filled with milk, which had been the case for one week previous to her confinement, and so abundant was the secretion, that the milk flowed from both breasts in such quantity as to make it necessary that cloths should be kept over them, to absorb the waste.

Mrs. H. gave the following history of her case: "I was married ten months ago; was unwell (menstruated) but once after my marriage; suffered for several months with nausea, every forenoon; was told by my mother and friends that I was in the family way; commenced growing larger until the fifth month, when I felt something moving in me, which I was told was the child. This motion continued at times until last week, when I felt pain in the back and slight bearing down pains, which gradually increased until two days ago, when mother sent for the midwife—for these two days I have felt great pains, and lost a great deal of blood." She was much disappointed, and seemed greatly mortified, but very humorously remarked that she knew "the fault was her husband's, and that if next time she had no better *turn out* she would dismiss him."

She is about twenty years old; fine figure; and a very "picture" of health. The secretion of milk continued unabated, until I gave bryonia for several days, when it gradually subsided.

She is now enciente, and I shall watch her case with interest to its development.

The hydatids hang from a substance slightly resembling a placenta, but much more solid, resembling liver, and this substance contains hydatids imbedded all through it. The size of these sacs varies from a large grape to that of the smallest pea. I have the whole preserved in a glass jar, the placenta above, and the large bunch of hydatids hanging beautifully to the bottom.

Eighteen years ago I had a similar case, and they are the only cases I have ever seen.

Can not some of our brethren who have leisure and intellect interrogate Dame Nature as to her lusus, and find out the secret of such a result?

I should have stated that the first case occurred in the mother of several children.—*N. A. Homœopathic Review.*

Consumption—Tuberculosis—Phthisis. Purgation, Inhalation, the Hypophosphites, and Dietetics and Regimen as Curative Agents in Consumption.

Most intelligent medical men agree that in what is usually called Consumption there is general disease of the system. All the secretions and excretions are more or less vitiated, though the severity of the diathesis, or general disease, falls upon the lungs, as the weaker organ of the body, arising from some peculiar predisposing cause. Every system of cure that looks only to the lungs, or seeks to operate solely on the organs most affected, is doubtless erroneous. *Inhalation*, which was all the rage a few years ago, has been generally abandoned as a humbug, and no longer deludes even the most ignorant. The

Hypophosphites followed, and has attracted considerable attention both in Europe and America. Dr. J. T. Churchill, of Paris, asserts that he has discovered that Consumption is caused by a deficiency of oxidizable phosphorus in the blood and tissues of the body, and that the Hypophosphites of lime and soda will, when administered, regulate this deficiency and thus both prevent and cure Consumption. Every body is probably aware that phosphorus is highly poisonous and dangerous, and will not assimilate with the blood at all; though phosphorous acid will, and was first used as a remedy in Consumption some eighty years ago.

The "*North American Medical Reporter*," a quarterly publication of considerable merit, has the following very sensible remarks, in an article on the Hypophosphites as a cure. Without especially condemning their use, the editor says:—

"In our opinion, however, in all cases, a judicious diet and regimen has as much to do with the cure of Consumption as any system of medication. Notwithstanding the many theories and hypotheses, and the various modes of treatment instituted for the cure of Consumption, it is not only unchecked in its progress, but the mortality arising from it is, at this very hour, in all civilized nations, greater than ever before."

Consumptive patients, says the journal alluded to, are everywhere drugged to death, the Hypophosphites, Inhalation, etc., etc., are absurdly heralded all over the country as specifics.

Now, as Consumption is attended with more or less of those symptoms that characterize general fever, with diminished and disordered secretions in every part of the system, it should be treated rationally. If we should pay proper attention to the alvine evacuations, cleanse the bowels with proper purgatives, pay attention to all of the secretions and excretions that are deficient, partake of a generous diet, breathe a pure atmosphere, and indulge in as much gentle exercise of mind and body as is compatible with our condition, there would be fewer deaths from this dread disease.

Undoubtedly the glandular and lymphatic systems are much disordered in Consumption. Some say there is a deficiency of phosphorus in the blood and tissues; some say there is a deficiency of albumen; and some say both are deficient. But we say that if you will only regulate all the disordered secretions and excretions of the system, live in accordance with Nature's laws, and attend to diet and regimen, if you do not get rid of your Consumption, you will find no benefit from your boasted Hypophosphites, Inhalations, or any other fanciful remedy yet heard of. An increased number of deaths from Consumption seems to follow every new remedy that chemical science unfolds to a credulous public. It is amusing to hear learned physicians talk of increasing the phosphoric acid of the blood, the albuminous principle, or any other principle, supposed to be deficient, by giving the Hypophosphites of Lime, Soda, Manganese, or the Iodides, or Chlorides of the same.

Professor Clark, of this city, has recommended a nutritive article for use in Consumption, that is in our judgment far better than all your Hypophosphites, Iodides, or Chlorides. This new article is simply *pure sweet cream.* He says it is far better than all your cod-liver oil for Consumptive patients. We agree with the Professor in this respect. We intend to say a great deal about Lung Consumption hereafter, and simply allude to it now, to aid in checking the trade in Hypophosphites. A few doses of some good cathartic—Brandreth's pills for example—as a medicine; a little of Professor Clark's pure sweet cream, together with other articles of a generous nature as a diet, and the inhalation of the pure atmosphere of Heaven, and proper exercise, and if your Consumption don't leave, you need try nothing more. Persevere in this treatment, and you will have done all that true science points out.—*New York Mentor.*

PART THIRD.

CLINICAL PRACTICE.

Clinical Reports of the Eclectic Medical College, Pa. Services of Prof. W. Paine, M. D. Reported by John G. Rich, M. D.

Case I. October 4. Mr. McVail. Aged 37. Tinsmith by occupation. Complains of pain in the bowels, in the umbilical region; also, has more or less pain about the apex of the heart. Appetite is good, tongue flat, tremulous, and curled down, some dizziness in the head, troubled with strange dreams at night. On percussion, the heart yields normal sounds. Bowels flat and dull. This patient had intermittent fever ten years ago, and a year previous to this date was troubled with spermatorrhea. He is a single man.

Diagnosis.—Gastro-intestinal irritation, chronic dyspepsia—brought on by reverses in fortune, excessive use of malt liquors and tobacco.

Treatment.—As the bowels are constipated,

℞.—Podophyllin, grs. iij.
Potass. bitart., grs. xx.
Xanthoxylin.
Sacch. alb., *aa.* grs. xx. M.

Trit. Divide in chart. No. iij. Dose—one every three hours until it produces active catharsis.

He is to use an alkaline bath every morning, discontinue the use of tobacco and liquor, take plenty of exercise in the open air, after the cathartic has operated,

℞.—Hydrastin, grs. x.
Xanthoxylin, grs. iij.
Soda bi-carb, grs. xv.
Acaciæ pulv., grs. L. M.

Trit. Div. in chart. No. xv. Dose—one three times a day on an empty stomach.

October 8. Mr. McVail.—This patient has been before the class at a previous clinic. There is a decided improvement in all his symptoms. He now has very little, if any, abdominal or cardiac pain, the heart beats with more regularity, he rests better at night, appetite is improving, etc., etc.

The cathartic operated thoroughly. Continue the same treatment as before. In this case the xanthoxylin, as is not unfrequent, produced ptyalism.

Case II. Edward Dinsman. Aged 17. Tobacconist. He has been afflicted with soreness in the throat for eight months. In the morning he has a bad taste in the mouth, skin is sallow, there is bulging of the stomach, which yields a dull sound on percussion, tongue coated, with a narrow groove or streak down the center, the edges are curled upward, and it is considerably thicker than is natural, denoting gastric irritation, or a species of dyspepsia, liver yields a flat sound on percussion, there is obstruction of the portal circulation. Appetite is good. Bowels constipated.

Treatment:

℞.—Podophyllin, grs. iij.
Neutral mix., ℥iij. M.

Dose—one third every two hours, until it produces free catharsis; after which,

℞.—Leptandrin, grs. x.
Hydrastin, grs. v.
Pulv. acaciæ, grs. c. M.

Trit. Div. in chart. No. x. Dose—one three times a day, on an empty stomach. He will also use an acid bath daily—that is, sponge the surface off with vinegar, followed by brisk friction with a crash towel. These acid baths neutralize the volatile oil or principle of tobacco. Also, take plenty of exercise in the open air. If possible, get into some other business.

October 13. Edward Dinsman. This patient has been before the class before. There is a decided improvement in all his symptoms. His cathartic operated some half a dozen times, and has left his bowels in a soluble condition; feels better, in every respect. As we have done nothing specifically for his throat, we will give

℞.—Hydrastin,
Leptandrin, *aa* grs. x.
Ext. belladonnæ, gr. i.
Pulv. acaciæ, grs. c. M.

Trit. Div. in chart. No. xv. Dose—one every night and morning. Continue the acid baths, and his exercise in the open air.

Jesse Brush. Aged 45. Engaged in out-door occupation. He has been complaining for ten years; has been under all kinds of treatment: he complains of dryness in the throat, constipation of the bowels, hemorrhoids, pain in the small of the back, soreness of the stomach, and great nervous debility. In this case there is evidently dilatation of the large curvature of the stomach, with pseudo-membranous deposits upon that organ, the liver is shriveled and small, and it, as well as the spleen, kidneys, and stomach, is very tender; in fact, all the portal organs are in this condition, denoting general dyspepsia. Tongue is coated, tremulous, and, to use his expression, feels like sole leather; when he wakes up in the night his throat is also very dry; has had the uvula excised, which accounts for this peculiar condition mainly, if not in toto, as the object and office of this peculiar appendage is to secrete a fluid for the express purpose of lubricating the glands and organs of the throat. He is restless at night, and occasionally expectorates a thin, glairy mucus.

Treatment:—He will take a little salt and water previous to each meal, and by this means wash out his stomach. In this case it is necessary to proscribe all non-nitrogenized food, except butter; because the organs employed in their digestion and assimilation are diseased; therefore, we prohibit all acids, sugar, and fats. His diet will consist of baked potatoes, broiled steak, stale bread and butter, boiled rice, and drink a coffee prepared by cracking white beans, roasting them, and then made as coffee proper, to which add good cream, but no sugar; this makes a very palatable drink, as well as good tonic for the stomach.

℞.—Ammonia mur., grs. x.
Menispermin, grs. v. M.

Div. in chart. No. v. Take one every three hours in a little water. After these are all taken,

℞.—Podophyllin, grs. ij.
Neutralizing mixture, ʒij.

Take this at two doses, three hours apart. After this operates on the bowels,

℞.—Xanthoxylin, grs. x.
Hydrastin, grs. x.
Pulv. acaciæ, grs. l. M.

Trit. Dividenda in chartula numero x. Take one three times a day; also, take a whip bath every morning, followed by brisk friction with a coarse towel.

Miss Sarah Tussey. Aged 35 years. Has been complaining ten years. She is of a nervous temperament, has been under homœopathic treatment, has some cough, sore throat, hands hot, feet cold, bowels alternately constipated and diarrhea, restless at night, catarrhal affection of the head, aphthæ of the mouth, liver is exceedingly inactive, large, congested, and full of acrid bilious matter, stomach is contracted—owing to nervous debility.

Treatment:—The treatment to-day will be only preparatory.

℞.—Lupulin, grs. x.
Neutral mix. ʒiv.
Podophyllin, grs. iv. M.

Take one teaspoonful every three hours.

Mr. McVail. This is the third visit of this patient to the class. He feels a little weak yet, and a little nervous, but, in other respects, he is decidedly better. We will now give him a tonic, as,

℞.—Populin, grs. x.
Hydrastin, grs. xx.
Pulv. acaciæ, grs. l. M.

Trit. Div. in chart. No. x. Take one three times a day.

PART FOURTH.

EDITORIAL.

TIME, with untiring tread, has completed another cycle in his ceaseless rounds to eternity. The old year has passed away, and a new is ushered in, bringing with it its changes. We look in vain for stability; the Eternal alone is immutable. The world is a puppet show, and men the *automata*, changing their position according as they are pulled by the varying strings of interest. In the great panorama of life, all things with which man deals, participate in these mutations, and our Journal forms no exception. Since its establishment, it has undergone various changes to suit existing circumstances. Last year it appeared in a new dress and with a new name; this January finds its name again altered. One of its former editors has left, another has been installed, and it has passed into the hands of a new publisher. In one thing, however, it has been steady and unchanging. It was originally established to be the faithful exponent of Eclecticism, and the firm advocate of reform. From this course it has never deviated, and will always remain true to its first principles.

The reason for the assumption of a different name is known to many. It will be remembered by those who take an interest in the history of our Institute, that a few years since, in consequence of misunderstandings and misrepresentations, a difficulty arose among the faculty, a division occurred, and those who had been united for the purpose of breaking down medical dogmas, and of introducing a more rational system of practice, became antagonists and warred against each other. A new school and new journal were established. But fortunately these misunderstandings have been removed, the schools united, their respective organs blended, and the name of the *resultant* made to represent the union; hence the reason for now dropping the "Edinburgh" and making it read the "Eclectic Medical and College Journal." The day this arrangement was consummated constitutes a most auspicious one in our history. Our prospects now are more flattering than they have ever been, our power concentrated, and the *cream* of the talents of both Faculties made available in teaching our doctrines and sustaining this Journal. Every friend of our cause should hail this event with feelings of pleasure.

It affords us much gratification to take our seat as Associate Editor and Publisher under such auspices. We offer to all the friends of our Institute and the patrons of the Journal our warmest congratulations and greetings, and extend our editorial hand, hoping, though a stranger, to receive a cordial welcome, and be admitted without suspicion as a co-worker and co-adviser, into the private councils of such as are earnest seekers after new truths in medicine. We say to all who shall honor us with their confidence, that we shall advise nothing but what we consider truth, and shall bestow much time and what talents we may possess, in making this Journal *practically useful* to our readers.

It is our determination to present a monthly periodical unsurpassed by any in the country. We shall endeavor, by varying the contents, to suit the tastes of all. It shall contain original communications, selections from home and foreign journal, clinical practice, favorite recipes, etc., etc. We shall endeavor to keep our readers "posted" on all improvements and discoveries in every department of medicine, and on medical literature generally. We have the promise of the co-operation of our entire Faculty, and thus will have a splendid array of talent to support us. We also expect contributions from practitioners throughout the country, and will take the opportunity of urging them to send us reports of all the important cases which may come under their observation. By so doing, much valuable information will be accumulated and transmitted to future generations, and the names of the authors made imperishable. It also affords us pleasure to announce that Dr. T. L. A. Greve has agreed to translate monthly, the most interesting articles in the *Zeitschrift fur practische Heilkunde.* This is one of the leading organs of the continent, edited by the medical faculty of Vienna, and always contains much useful matter. We consider this an important addition to our Journal, and our friends may look regularly for a treat from this source. Dr. Greve is a perfect master of the German language, a thoroughly educated and scientific man, a pleasing, clear and graceful writer, and his translations will be read with deep interest. The Journal will be issued so as to reach subscribers by the first of every month. With these flattering prospects, and by unremitting care and labor on our part, we hope to merit a continuance of the large share of public favor and patronage which has always been bestowed upon us. To those who have aided in sustaining the Journal—and thereby the spread of Eclecticism—by contributions, influence and patronage, we extend our warmest thanks, and solicit a continuation of their favors; while to such as have reaped the benefit of unpaid labors and self sacrifices, and show no disposition to make a compensation, we desire to suggest a few thoughts.

In the infancy of our Institute it was considered expedient to adopt the "low fee system." The privilege of medical teaching and the obtaining of a degree, were thus placed within the reach of almost every one. Hundreds, with exceedingly limited means, availed themselves of the opportunity presented and obtained a diploma. As practitioners they have been enabled to gain a handsome living, and in this way, by the uncompensated labors of other men, have been raised from the ditch and jack-plane, to an honorable and lucrative business. Many have grown rich, and now that they have made so fortuitous a change in their worldly condition, think or care nothing of their *alma mater* or its organ. They will contribute nothing to their support. Such may be likened to the serpent in Esop's fables, which bit its benefactor after he had warmed him in his bosom. We deplore this display of ingratitude to benefactors, and lack of interest in Eclecticism, and hope all those who are guilty of said offense, together with delinquent payers, will awake to a sense of their duty, "turn over a new leaf" with the beginning of a new year, and like conscientious men, discharge their obligations.

Many regret the necessity which induced one of the former editors of the Journal to leave a position which a well stored mind, a versatile intellect and ready pen so well qualified him to fill. We are truly sorry other business has called him from our ranks, where he so long and ably did service during the darkest days of our struggle for standing and position, and lent such powerful aid in breasting the torrent of persecution by which opposing sects, jealous of our success and influence, endeavored to overwhelm us. We feel sensible of great services rendered, and the name of Bickley will long be gratefully remembered by those who have had the privilege of listening to his lectures and reading his productions.

But, though one active worker has left our midst, we rejoice to say that the main pillar and stay of the Eclectic edifice still retains his position, and by his connection with the College and this journal, his talents and indomitable energies will continue available in teaching and spreading the doctrines of Eclecticism. No man has made greater personal sacrifices, or bestowed more time or labor in establishing our system than the leading editor of this journal; and even yet he does not tire of his work, but with many earnest and efficient colaborers is still striking for a great public good. It is useless to deny that a great change has been effected in the practice of medicine. The most bigoted Allopath has to acknowledge that not one fiftieth part of the amount of mercurial preparations is given now that was used ten years ago, and the practice of general blood-letting is almost entirely abolished. These are important reforms, and by them many valuable lives have been saved. It is needless to ask what influence has produced them. Eclectics were the pioneers who felled the first trees in the dense forest of modern medical dogmas, and dared to brave the contempt and ostracism of the so called "regular profession." The spirit of free thought and investigation was started, and has resulted in the abandonment of Dr. Rush's old routine system of sixteen ounces from the arm, and "ten in ten" (Calomel, Jalap *aa* gr. x.) and the adoption of a more sanitary mode of practice. Practitioners in all quarters are now adopting our principles, using our medicines, are proportionally more successful, and hence the public are the gainers. This fact is not properly appreciated by the people, and we do not receive our due share of credit; but hope, for their advantage, that the good time is not far distant when, with Mr. Syme, all medical men will abandon calomel entirely, and with the physicians of some of the New York hospitals, will introduce a little podophyllin into their prescriptions.

We have made fair promises to our readers, and intend to adhere to them. Our journal is now in a healthy condition, and if our subscribers sustain it promptly, it will be our pride to make it so instructive and entertaining that they will welcome it at the beginning of every month as a pleasing and interesting companion and counselor. With this determination we once more extend our greetings and a happy new year to our friends, and spread our sail upon the troubled sea of editorial life. C. T. HART, M. D.

A NEW FEBRIFUGE.

"I send you a sample of a new medicinal plant—new, I think, in your section—which I suppose belongs to the pink family, but being no botanist I can not say positively. I obtained the knowledge of it from the native Spanish population of this place, who call it *Concha Agua*, the literal English of which is water shell, or sea shell. The name must have been accidental, as I can see no natural fitness in it. I am not aware that it grows out of California, though I hope it does. The accompanying specimen is of small growth, owing to the dry season, and it is now in full bloom. It is an annual, having pink-red flowers with five corols, a whitish center, one pistil, some five stamens, and deep yellow pollen. The natives esteem it as the greatest *febrifuge* on earth, and when they are fatigued they use it as a toper does his dram, to revive them. For the latter purpose they use a cold infusion, but in fevers they use a warm infusion of the plant, which causes diaphoresis and a removal of the fever, after which they use the infusion cold. I am satisfied it is all they claim for it—an extraordinary medicine, and I desire to have it incorporated in the Eclectic Materia Medica." T. J. HARVEY, M. D.

LOS ANGELOS, Cal.

The above is an extract of a letter placed in my hands, (with a specimen of the plant referred to). Not being acquainted with it, I placed it in the possession of an eminent botanist for examination, who informs me it is the "Erythræa chironioides," (*Torr*,) a species first discovered by the Pacific R. R. expedition, and yet in no botany except the Public Documents. J. KING, M. D.

A NEW PERIODICAL.

Prof. Scudder will issue this month the Family Journal of Health, a monthly periodical of thirty-two pages, devoted to the spread of Eclecticism among the people. We bespeak for it a favorable reception. With but slight exertions each physician might get a club of ten, twenty or more, and thus introduce into his neighborhood a constant advocate of the system of Medicine he practiecs. Try it; we believe the exertion will repay you an hundred fold. The journal is published at the low price of fifty cents, where clubs of ten or more are formed. Address, J. N. Scudder, M. D., Box 2209, Cin'ti.

PROF. GARRISON.

We invite the attention of the profession specially to the card of Prof. Garrison. The necessity of a reliable analytical chemist in this city has long been but too apparent. It is almost impossible for practitioners whose attention is seldom called to the subject, to keep so thoroughly posted in the minutiæ of chemistry as to be willing to rely upon an analysis of their own, even if they had all the chemicals and apparatus with which to execute it. To those who have heard Prof. G. lecture and witnessed his demonstrations, no word of commendation is necessary. To those who have not the pleasure of knowing him personally, we have no hesitancy in saying you will find him a most thorough chemist and a rigidly exact analyst.

BOOK NOTICES.

The American Eclectic Practice of Medicine. By the late Prof. I. G. Jones; revised and extended by Prof. W. Sherwood. Cincinnati: Moore, Wilstach, Keys & Co. 2 vols., pp. 1600. Price $7.00.

This excellent standard work has been heretofore noticed by us in terms of decided approbation; but we deem it our duty to once more call the attention of the profession to it.

We do not propose to enter into a detailed description of the work at this time, further than to say, that it has been adopted as the text book in the Eclectic Medical Institute; that it comprises not only the very full and lucid course of lectures delivered by Prof. I. G. Jones in the Institute in 1851–'2, but also a comprehensive view of the General Pathology, as well as copious notes and full descriptions of several special diseases by Prof. Sherwood; and that it has been brought out in the very best style of the accomplished publishers whose imprint it bears.

This work is meeting with a steady sale, which is one of the best proofs of its merits, and we hope that every liberal-minded physician in the country, as well as every medical student, will obtain a copy,—thereby securing the very work on practical medicine which he ought to have, for study and daily reference, and at the same time affording such patronage to those who are laboring to elevate the literature and extend the influence of Eclectic medicine as will show that their services are duly appreciated.

AN INTRODUCTION TO PRACTICAL PHARMACY: designed as a text book for the Student, and as a guide for the Physician and Pharmaceutist. With many formulas and prescriptions. By EDWARD PARRISH, Graduate in Pharmacy; member of the Philadelphia College of Pharmacy, and of the American Pharmaceutical Association; and Principal of the School of Practical Pharmacy. Philadelphia: Second edition, greatly enlarged and improved. With two hundred and forty-six illustrations. Philadelphia: Blanchard & Lea. 1859. pp. 720.

A copy of the above valuable publication has been placed on our table by the publisher. In February, 1856, we noticed the first edition of this work, and commended it to the careful study of the profession, especially Part III.

The present edition has been considerably improved and enlarged. The whole book bears evidence of the careful and revising hand of its author; it has been brought up to the present time in all that is practical and useful.

No dispensing druggist ought to be without it, and all physicians who put up their own prescriptions, would do well to have a copy in their libraries. Price $3.50. For sale by J. G. Henshall, No. 110, Sixth street.

The New York Mentor. Published every Saturday, at No. 429, Broadway. Terms, $1 a year, payable in advance. A. Ingraham, Editor and Proprietor.

This paper, recently established in New York, is both a news and medical sheet. Its object is to popularize medicine, and to divest it of "all that jargon and mystery with which it is enveloped," and make it comprehensible to the public mind. It is giving a history of medicine from its origin, is presenting the nature and remedies for diseases in plain phraseology, and laying before its readers much practical and useful information. We think well of the enterprise, and wish its editor much success. It is of vital interest to the public that they be enlightened upon the diseases to which they are liable, and especially the necessity of keeping constantly in view the hygienic measures which are to procure their exemption. The Mentor is a useful and entertaining paper, and comes every week loaded with highly interesting matter.

OBITUARY RECORD.

Prof. Alison.—It is with deep regret that we announce the death, on the 22nd of September, of one of the brightest ornaments of our profession, our honored teacher and much valued friend, William Pulteney Alison, M. D., F. R. C. P., Emeritus Professor of the Practice of Physic in the University of Edinburgh. He died at the age of 70, an older man than his years warranted, bowed down by the effects of extreme labor and zeal in the pursuit of his calling. For many years he occupied the chair of Practice of Physic in the University of Edinburgh, a meet successor to Cullen and the Gregories. We attended his last course of lectures, in the winter of 1854–'55, and though the honored speaker was so worn by ill health that his voice could scarce be heard throughout the class-room, yet his teachings were listened to with the most profound attention. On one occasion, we remember it well, the old man was seized with a fit during his lecture. There was scarcely a dry eye in the auditorium. Next day, when he announced to his class that he feared he must soon leave them, the most heartfelt regret was felt and expressed on all sides. Every one in the University loved "Old Alison" as a father. His eminence in the profession is too great for us more than to allude to it here. His pupils carry the results of his patient observation and profound learning to all quarters of the habitable globe. An old man, and widower, he supported an aged sister, and lived but poorly, for all his earnings had been spent in charitable deeds; and it was with regret that the patrons admitted of his resignation of his chair, knowing as they did that he had little else to depend on. Lord Palmerston, however, procured him a pension, to which the Edinburgh corporation added something, and he received the appointment of Emeritus Professor immediately on his resignation. His brother is the well known historian, Sir Archibald Alison, of Glasgow. Few men have died in Scotland of late, whose hold on the affections of the people has been half so strong. Peace be to his ashes. He has gone to receive a higher crown than earth can afford.

Dr. Alison was born in 1790, of cultivated parents; his father an eminent clergyman, and his mother the daughter of Dr. John Gregory. He himself desired to join the army, but his father's entreaties prevailed on him, and he devoted his attention to medicine, studying under his eminent uncle and predecessor in the chair of Practice of Physic, Dr. James Gregory. In 1820 he received his first appointment in the University, the chair of Medical Jurisprudence. Shortly after that he accepted the chair of the Institutes of Medicine, now held by Hughes Bennett, and filled his chair with such eclat, that when the chair of Cullen and the Gregories became vacant, it was at once ceded to him. He filled the last till 1855, when, as we have said, he resigned on account of age and bad health. He also held the chair of Clinical Medicine in the University, and was a leading physician of the Royal Infirmary and Edinburgh Dispensary. During the last thirteen years of his life he was subject to epileptic attacks, which ultimately hastened his decease.

During his life of toil he published many celebrated papers, on the "Contagion of Fever," and "On Vital Affinity," "On Blood-letting in Disease," "On the Management of the Poor," and a large part of the "Cyclopædia of Practical Medicine," and two larger works, "Outlines of Physiology," and that by which he was best known, his "Outlines of Pathology." The last honor conferred on him was his election as President of the British Association, at its meeting in Edinburgh last year.—*Nash. Jour. of Med. and Surg.*

EDITORIAL ABSTRACTS AND CLIPPINGS.

Connection of Neuralgic and Gouty Affections.

Dr. J. A. Easton, Professor of Materia Medica in the University of Glasgow, argues that neuralgia and gout are but symptoms of the same poison existing in the blood. When uric acid accumulates in the circulation, either from imperfect metamorphosis and assimilation of nitrogenized food, or deficient eliminative action of the kidneys, its presence is manifested by symptoms to which the name of gout is applied. So constant is the connection between the peculiar pain and the presence of uric acid, that the occurrence of the latter is considered a pathognomonic sign of gout. An examination of many persons with neuralgia, discovered a great abundance of oxalate of lime in the urine. The Doctor then argues that oxalic acid is a product of the oxidation of uric acid, and the salts of the one often replace those of the other. In support of this position, he cited the remark of Dr. Golding Bird, that a considerable amount of urate of ammonia existing in guano is changed spontaneously during transportation into oxalate of ammonia; the experiments of Wohler and Frerichs, who found that when uric acid was introduced into the organism, oxalate of lime appeared in the urine; and the fact more recently presented by Dr. Garrod, who witnessed the production of the same salt from the decomposition of uric acid in blood serum. From this course of reasoning, and these data, he concludes that the neuralgic and gouty diathesis both depend upon one and the same cause, gout being a manifestation of the existence of uric acid, and neuralgia of the presence of the product of its oxidation—oxalic acid or its salts.

His treatment for these affections consists in the administration of nitro-muriatic acid in doses of twenty drops three times a day. The accumulation of uric acid, the urates, or oxalate of lime, depends a deficiency of oxygen, and nitro-muriatic acid furnishes that element. When nitric and muriatic acids are united in proper proportions, chemical changes take place, which result in the evolution of chlorine and the formation of water.

"But the chlorine reacts upon the water, combines with its hydrogen, sets free the oxygen, and thus earns for itself the title of an oxidizing agent. The chlorine is therefore the real instrument which liberates oxygen in that nascent state in which its energy is the most intense." The oxygen thus liberated attacks the acids or decomposes their salts—carbonic acid and other products being formed, which are readily eliminated.

Free Ventilation.—In the Island of St. Kilda, in 1838, eight out of every twelve children died between the 8th and 12th days; the great, if not the only, cause being the filth in which they had lived, and the noxious effluvia that pervaded the houses of their parents.

Dr. Bell says, that an action (brought by the Commonwealth) ought to lie against those persons who, either for sale or to rent, build houses containing rooms constructed so as not to allow of free ventilation; and that a writ of lunacy should be taken out against those persons who are willing to occupy them.

Dr. Andrew Combe says, that one cause of convulsions is the breathing of impure air; and he gives it as his opinion that bad food and deficient clothing are not to be compared with the constant inhalation of a vitiated atmosphere for injurious effects on children.

Poisoning by Cyanide of Potassium.

At a late meeting of the New York Pathological Society, Dr. Finnell presented a specimen of a stomach removed from a patient who was poisoned by cyanide of potassium. The patient was a daguerrian artist. He swallowed a piece of salt as large as the end of the finger. Immediately he cried for water, but before he could get his mouth to the pipe of the hydrant he died. Death took place in from three to five minutes after he swallowed the poison.

In answer to a question from Dr. Clark, he stated that the symptoms of poisoning by this salt were very like those from poisoning by prussic acid. The death was very rapid. This was the third case he had met with. This man lived but three minutes, another lived twelve minutes, and a third he was not certain how long he survived; it was a very short time, however. In each of the cases the stomach was intensely reddened.

Dr. Dalton thought it was important to know that injection of the stomach took place in so short a time as three minutes, unless most of the change was post-mortem.—*Nashville Monthly Record.*

Poisonous Effects of Belladonna used Externally.

A lady, aged about forty-three, suffering from severe pain in the hypogastric region, was ordered to apply the following liniment twice a day:—Camphorated oil of henbane, thirty, and extract of belladonna, four parts. Forty-eight hours after commencing its use she was seized with delirium. The pupils became dilated, and there were irregular movements, lypothymia, redness of the face, and a fixed stare. Sinapisms were applied to the feet, acidulated drinks were administered, and a bleeding was to be performed, when abundant menstrual discharge came on, anticipated the proper epoch by ten or twelve days. The symptoms of poisoning gradually disappeared.

Saline Injections in Diptheritis.

M. Roche states that he has been so successful in some cases in which he has tried the injection of a solution of chloride of sodium into the throat, that in his next case he is disposed to employ it as the sole means of treatment. He practices, in fact, a continuous, or almost continuous, irrigation of the throat, by means of Eguisier's irrigator, provided with a canula having a very small jet. He believes that it is in such irrigations, whether employing salt, alum, or the chlorates, we should seek for curative agents.—*Union Medicale.*

Strychnia in Chronic Intermittents

In the New Orleans *Medical News and Hospital Gazette*, Dr. Harrison, of Arkansas, has an article upon the use of strychnia in chronic intermittents. The following is his formula:—

"R.—Strychnia, gr. iss.
Sulphate quinine, gr. xv.
Capsicum, gr. vj.
Brandy, ℥ iv.

"Of this mixture, I direct one teaspoonful (for an adult) every hour, for six or seven hours preceding the expected paroxysm; at the end of this time I require the patient to take a cup of warm sage tea, and go to bed, (if he is not already there,) and remain until the paroxysmal hours pass. This course is to be repeated on the next 'chill day,' after which a teaspoonful of the medicine is to be taken two or three times a day, until the four ounces are exhausted."

With Dr. H. Campbell's views of the nature of this disease, and of its relation to the nervous system, the philosophy of this treatment becomes at once apparent. This, however, is not altogether new treatment. Dr. Brainard, of Chicago, recommended strychnine, in an eighth-of-a-grain dose, three times a day, in similar cases, more than twelve years ago. (See *Indiana Medical Journal* for July, 1847.)

We are confident that the remedial powers of strychnia are not yet fully brought out. So far as we know, we were the first to use and recommend it in *sciatica* and chronic rheumatism; and we have seen cases of dyspepsia and chronic costiveness yield to it like a charm.—*Jour. Mat. Med.*

Treatment of Ascarides.

The treatment for ascarides vermiculares should be entirely local. Dr. Schultz Bipon, of Daidesheim, has published in the *Deutsche Klink* the formula of the solution of nitrate of silver he employs in this circumstance, and the effect of which, he says, is infallible. The following is the formula:—

R.—Argenti nitratis cryst., 8 gr.
Aq. distill, 6 oz.

for an enema.

This enema is perfectly harmless. Three are usually required for cure. The first is generally retained imperfectly;

the patient returns it shortly after it is administered with a great number of ascarides. It should be repeated the next and following days, and it seldom happens that after a treatment of four days the rectum is not rid of its troublesome guests, whose presence gives rise to such various and strange symptoms.—*Ib.*

Erysipelas.

In the *Medical and Surgical Reporter* for August 13th, J. R. McClurg, M. D., of Philadelphia, has an able article upon the above subject. In regard to treatment, after the action of an emetic and a saline cathartic, combined with a mercurial, if there be symptoms of bilious derangement, he says:—"I always use some tonic medicine, and my favorite prescription, and the one I uniformly use in all cases of erysipelas, of whatever form or character, as soon as the system is prepared for it, is:—

"R.—Spiritus ætheris nitrici, f. ℥ ij.
Tinctura ferri sesqui chloridi, f. ℥ ij.
Quiniæ sulphatis, gr. xvj.

Misce et S. Take a teaspoonful every three hours. This constitutional treatment I have found very successful in my hands, and desire nothing better.

This corresponds very nearly to the treatment we have found very serviceable. We are, however, in the habit of prescribing the tincture of iron in a little larger doses, say twenty drops every three hours; and the quinine in combination with Dover's powders, from one to two grains of the former to five of the latter, every four or six hours.—*Amer. Med. Monthly.*

Omit the mercurials, and the same effect will follow.—Ed.

Hydrocyanate of Iron in Epilepsy. By E. S. McIntire, Pontoosac, Ill.

After observing the hydrocyanate of iron so highly spoken of by Prof. McGuigan, in epilepsy, the writer was induced to try its effects in an aggravated case of this disease, of eight years' standing, upon a young man aged 22 years, sanguine temperament, who usually enjoyed good health, except on the return of the paroxysms, which were expected every two weeks, sometimes they came much oftener, with all the symptoms of this most horrible complaint in the severest forms; after which for twenty-four hours he suffered with delirium and madness hardly surpassed by hydrophobia itself, regardless of the nervines, etc., which the family gave in profusion.

The hydrocyanate was given in combination with extract of hyoscyamus, (Tilden's) in the following form:—

Hydrocyanate of iron, sixty grains,
Extract hyoscyamus, " "
Mucilage, q. s.

Make one hundred and twenty pills, one to be given night and morning, and increase one pill every three weeks till three pills are taken at a dose.

This was given on the first of last November; about a month after this time he suffered from a return of the disease, though of a milder form than previous to using the hydrocyanate of iron.

He is now taking six grains of the hydrocyanate daily; the dread of a return of the paroxysms is now no more on his mind. He reports himself in good spirits. I wish other members of the profession who have given this agent a trial, would report the results, that I may know whether this case is an exception or not.

Propylamin.

This organic alkaloid having recently come into use in Philadelphia, in testing its asserted powers, as a specific in rheumatism, Prof. Procter gives a formula for its preparation. Though it can be prepared artificially, and is found naturally combined with an acid in several plants, yet he recommends, as a most convenient source, herring pickle—the process as follows:

Propylamin is prepared by taking any convenient quantity of herring pickle, obtained from the dealers in salt fish; this is put in a retort or tight still, with sufficient potash to render the liquid strongly alkaline, and the liquid heated. A well refrigerated receiver, containing some distilled water, being attached, heat is applied as long as the distillate has the odor of herrings. This is then saturated with hydrochloric acid, evaporated carefully to dryness, and the dry chrystalline mass exhausted with absolute alcohol, which dissolves the propylamin salt and leaves the muriate of ammonia. From the former, the pure propylamin may be obtained in solution by means of hydrate of lime, using strong precautions to refrigerate and condense the vapors, which are actively disengaged almost without heating.

The author further states that propylamin is a colorless, transparent liquid, with a strong pungent odor that reminds one of ammonia, and quotes Dr. Awenarius of St. Petersburg, as follows:

Propylamin, as obtained from the pickle of herrings, cod-liver oil, ergot, human urine, etc., appears, according to the author, to possess the power of a true specific for the various affections of rheumatic origin. The diagnosis of these diseases being often very obscure, one can succeed by the use of propylamin in bringing to light in a few days the true nature of the malady. The author has treated, by means of this remedy, 250 patients in the hospital of Kaulinkin, at St. Petersburg, between March, 1854, and June, 1856; and besides, it has been employed in outside practice in a considerable number of acute and chronic cases of rheumatism. In acute cases the pain and fever always disappear the next day. The remedy was prescribed in the following manner, viz.:

R. Propylamin, gtt. xxv.
Distilled water, f. ℥vj. Mix,

and when necessary, add

Oleo-saccharum of peppermint ʒij.

Dose.—A tablespoonful every two hours.

Pen. & Ind. M. Journal.

Abscess of the Medullary Canal.

In nineteen cases observed by M. Brosa, fourteen occurred in the tibia. The suffering, which is intense and long continued, is readily relieved by the trephine. One of the cases thus operated on successfully by this surgeon, was in the medullary canal of the humerus.

The Empirical Treatment of Phthisis.

The *Lancet* says: Dr. Watson remarks, with great propriety, in his excellent lectures, that the more intractable the disease the greater the number of remedies proposed. No one is surprised at the various modes of treating tuberculosis, which have been extolled, for it is quite natural that new weapons should be sought against an enemy who proves invulnerable by the old ones. But we protest against unnecessarily teazing and tormenting the unfortunate individuals whose lungs are being destroyed by tuberculous deposits, and whose organism is wasting under the effects of the local mischief and morbid diathesis. M. Beau, physician to the Paris Charité Hospital, for instance, proposes, and has practiced the following method: "Give carbonate of lead in phthisis, because painters hardly ever suffer from the disease; and substitute one cachexia for the other." Then we have a paper addressed by M. Aussandon to the Academy of Medicine of Paris, "on the treatment of pulmonary consumption." The author, who has noticed that bakers, and generally those who sleep in the day and watch at night, bear the symptoms of the latter stages of phthisis better than others, straightway advises to keep consumptive patients awake at night and send them to bed in the day time!

Warren's Hæmostatic.

A correspondent requests us to publish the formula for Warren's Hæmostatic—or, *styptic balsam*, as it is very improperly called. This preparation has been highly recommended in hæmatemesis, epistaxis, and menorrhagia.

It is said to act by its sedative power in diminishing the force of the circulation, and by its astringent qualities in contact with the bleeding vessels.

The formula, and its mode of preparation, is as follows:

R.—Acid. sulph. (*by weight*) ʒv.
Ol. Terebinth,
Sp. vini rect, aa f. ʒ ij.

Place the acid in a wedgewood mortar, add the turpentine slowly, stirring it constantly with the pestle; then add the alcohol in the same manner, and continue stirring it until no more fumes arise, when it may be bottled, and should be stopped with a ground stopper.

It should be prepared from the *purest* materials, and when done, it should exhibit a dark, but clear red color, like dark blood; but if it be a pale, dirty red, it will be unfit for use. The dose is forty drops, and the method of using it is as follows:

Put a teaspoonful of sugar in a common sized tea cup, and rub in forty drops of the preparation until it is thoroughly incorporated, and then slowly stir in water until the cup is nearly full, when it should be immediately swallowed. This dose may be repeated at intervals of an hour, until three or four doses are taken, if necessary, and its use should be discontinued, when fresh blood ceases to flow.

After standing a few days, a pellicle forms upon the surface, which should be broken, and the liquid below it used. It does not deteriorate by age, if tightly stopped.

Auscultation of the Head.

M. Roger, a hospital physician of Paris, has of late been in the habit of ausculting the head, especially of children. In chronic hydrocephalus he has discovered a cephalic souffle, which is, however, absent in meningitis and convulsions. The practical result of M. Roger's investigations is, that the auscultation of the head may reveal alterations of the blood, and that the *bruit de diable* heard in the carotids, in cases of chlorosis, is heard as well and more easily by applying the stethoscope to the head.—*Lancet.*

PHARMACY.—*Preparation for Blennorrhagia.*

The *Journal de Medicine et de Chirurgie Practique* publishes the following formula, by Dr. Clerc:—

℞.—Cubebs, 60 grammes.
Copaiba, 20 "
Catechu, "
Conserve roses, q. s.

The patient should take, twice a day, a piece of the compound, of the size of a walnut. Sometimes Dr. Clerc directs it to be divided into eighty parts, giving from four to six at intervals during the day.

Solution for Injections for Inflammation of the Urethra.

℞.—Liquid chloride of zinc, 24 to 36 drops.
Distilled water, 4 ounces.
Agitate and filter.

Apply two or three injections a day. Each injection to be made with a small syringe, with very little of the liquid.—*Repertoire de Pharmacie.*

Anecdote of Charles Bell.

In a Life of this eminent surgeon, recently published in Paris, by Dr. Amedee Pichott, the following anecdote of the recognition of his merits by the famous French Professor Roux, occurs:

As Roux was lecturing to his students, Bell, desirous of listening to his mode of imparting instruction, entered the room. The Parisian recognized him, and was dumb. He closed his note book, and then turning to his students, as he pointed out the distinguished foreigner, he exclaimed—"Enough, gentlemen; enough for this day—you have the honor of seeing Charles Bell!

MARRIED—On Tuesday, Dec. 13th, by the Rev. David Steele, M. H. LYNN, M. D., to Miss MARY, daughter of James and Martha Reid, all of Randolph County, Ill.

Mispaged -

ECLECTIC
MEDICAL AND COLLEGE JOURNAL.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*An Eclectic Treatise on the Practice of Medicine.* By R. S. NEWTON, M.D., Professor of Surgery, and formerly Professor of Theory and Practice in the Eclectic Medical Institute.

We have in another place shown why it is that women and children are measurably exempt from any form of fever to which the other sex is peculiarly liable. This fact can not be explained by assuming any modification of the poison, if such it be. We have also explained why it is that negroes are but little liable to the southern fevers.

Yellow fever is sometimes produced under circumstances entirely incompatible with the idea of a malarious poison. Dr. Gillkrist, upon this subject, says: "In fairness, we can not think that, like many other places which may be mentioned where yellow fever is known from time to time to appear, it can not be admitted that Gibralter furnishes sources from which *malaria, in the usual sense of that word*, arises, sufficient to account for the appearance of a malignant fever; neither can we concede to authorities of great respectability, that either there or in various other places the solution of the question is to be found in a crowded population, the filth of the town, or the state of the sewers.

"If we consider the soil and elevation, it must be admitted that here, too, no satisfactory conclusion can be drawn; for if we find evidence, especially in the West Indies, and on the American continent, of the influence of a marshy soil, on several occasions, this does not hold good in other instances; and in those countries, as well as in Spain, many places might be mentioned, where elevation, soil, etc., would seem to guarantee immunity, but where, nevertheless, the disease occasionally prevails to a devastating extent."

If we had space to enter fully into this subject, it would be discovered that all the facts which favor the doctrine of malarious poison, equally favor our own views, and that those which are fatal to that hypothesis, are entirely compatible with ours.

If yellow fever be caused by miasm, it is supposed that it must in some way be associated with the decomposition of animal matter, because the disease is confined to cities, armies, ships, etc. The disease is never known in New Orleans when the river keeps full during the hot season; and when it becomes low, there is exposed an immense mud-bar through the whole extent of the city's front, in which was deposited, during the business season, an immense quantity of animal matter. Under such circumstances, is it not possible that the atmosphere may generate a species of animalculæ which may be inhaled, and thus produce the disease? Or, in lieu of this, may it not cause their generation in the human system? Dr. Rhees, of Philadelphia, states: "When the matters fresh thrown from the stomach were examined, the animalculæ were alive and in constant motion; but that no such phenomena could be detected in autumnal or bilious fevers." This circumstance demonstrates the existence of a very great difference between the two varieties of fever.

Diagnosis.—All fevers, in their initiatory stage, have so many features in common, that it is difficult to distinguish this from other febrile forms under two or three days, and yet there are signs which may guide to a very probable conclusion, such as the turbid conjunctiva, the great severity of the pain in the loins and inferior extremities, and, when the malady has further advanced, the great epigastric tenderness and the gastric irritability, the regular continuance of the fever for two or three days, and then succeeded by an abatement—intermission or remission, the yellowishness of the eyes and skin, and finally the appearance of the black vomit. If yellow fever prevails at the time, or if the other usually attending circumstances of the disease be present, the preceding symptoms can scarcely leave a reasonable doubt as to the character of the disease.

Prognosis.—This has hitherto most generally proved to be a very fatal form of disease, having its fatality sometimes to run as high as ninety-five per centum. We feel quite sure that such a fatality is, in a great measure, due to the prevailing ignorance of its pathology and requisite therapeutics.

It is now a well settled fact, that the disease is attended with a much more extensive mortality when it first appears than at any subsequent period—that its fatality declines from the beginning of the epidemic to its close; and from this circumstance it appears to be generally inferred, that the cause, whatever it may be, is more concentrated or capable of inflicting disease than it becomes to be at a later period. We regard this inference as being true only to a small extent, if at all. Our conclusion is, that the cause, when it becomes first introduced, cuts down all of the most vulnerable to its influence, and as the vulnerability diminishes, so do its fatality and the number of its victims. Dr. Wood says: "Perhaps the general average of deaths from yellow fever, prevailing epidemically, may be stated at one-third."

Among the unfavorable symptoms, Dr. Wood cites the following: Excrutiating pains in the forehead, back, and limbs; great frequency and fullness of the pulse, a gaseous state of it, or its entire absence at the wrist; a blood-shot appearance of the conjunctiva, and a bronzed or mahogany-color of the skin; a short and violent febrile stage; coma or convulsions; a slow respiration with deep sighs; hiccough; excessive restlessness, and a disposition to get out of the bed and walk; an unnatural apathy, or an expression of dogged indifference in the advanced stages; a voracious appetite; suppression of urine; an universal hemorrhagic tendency, with petecchiæ; and finally, the occurrence of the black vomit. This last symptom is regarded as almost necessarily fatal, but occasional recoveries are mentioned by authorities as having taken place after its appearance.

INDICATIONS.—Whatever the cause may be can matter but little when we know the absolute condition of the system, and that this is one of a high order of congestion there can be entertained no reasonable doubt. The indications then, must be to overcome all cutaneous stricture and stimulate its surface, and by revulsives to produce a centrifugal action in the circulation—in other words, our duty is to equalize the circulation, and to establish and maintain depuration.

TREATMENT.—In the early stage of the disease, should there be no irritability of the stomach, an emetic must be given, to be followed by an active cathartic, for which the Compound Powder of Jalap is admirably adapted; after the operation of the cathartic, the Compound Powder of Ipecacuanha and Opium, combined with equal parts of Quinine, may be given every hour or two in three or four-grain doses; and the bowels must be kept open daily, in every case, by small portions of Podophyllin and Leptandrin, frequently administered; but in cases of irritability of the stomach, in which everything is rejected from it, Mustard must be applied over the epigastric region, and energetic counter-irritation to the spinal column and inferior extremities, together with active cathartic injections, combined with pulverized Lobelia or a portion of Tincture of Lobelia and Capsicum. The patient may also eat ice in proper quantities, which will usually be found to assist in overcoming the gastric irritability.

The surface of the body, in all instances of this disease, and especially when gastric irritability is present, should be closely attended to, the whole surface should very frequently be bathed with a cold alkaline wash, which should be continued until the temperature is much diminished, and renewed whenever there is an increase of fever. In other respects, pursue the same course as laid down for congestive fever. Cold water may be allowed whenever the patient craves it, but should it be almost immediately rejected, small portions of ice should be substituted.

SPECIES V.—*Infantile Remittent Fever.*

We have concluded not to separate this form of fever from the general subject, as nothing could be gained by so doing.

This species has been divided into three varieties: the acute, slow, and low—and the differences between them are sufficiently considerable to justify the distinction.

VARIETY I.—*Acute Infantile Remittent.*

This form is distinguished by pain in the head and abdomen, slimy stools, little thirst, loss of appetite, drowsy exacerbations, and wakeful remissions; it begins, usually by several days, with marked symptoms of indisposition; the patient's color is changed; its expression contra-indicates health; its breath is offensive; it picks its nose and lips; has a dry cough, anorexia, swollen abdomen, and flatulence; it grates its teeth, moans and starts in its sleep; its urine is turbid, and upon cooling it deposits a whitish sediment; and its bowels may be either loose or costive. In the midst of these symptoms a chill is produced, which is soon followed by fever; but sometimes its beginning is sudden, and no introductory stage becomes apparent.

Of the paroxysms there are frequently three in twenty-four hours—one in the forenoon, one in the afternoon, and one at night, which is usually the most intense. It is hot and of course restless at night, and the diurnal exacerbations soon succeed. When the fever is severe, the remissions are short, and frequently not more than observable; it is attended by troublesome flatulence, an increased cough, a hurried respiration, and occasionally by nausea and vomiting. As the fever progresses, the exacerbations increase, and all of its attendant symptoms become aggravated, so that the pulse runs from 140 to 160.

At length, all the symptoms during the remissions abate; it begins to rest composedly; the pulse is reduced to 120 or 130 per minute; it is more wakeful, gives more attention to passing events, and is not unfrequently playful. In the exacerbations and remissions the skin is usually dry, and, when an exception occurs, the moisture is usually confined to the head, breast, or palms of the hands. As yet, neither food nor drink is desired, and when either is taken it is usually rejected as soon as swallowed. The urine has become limpid and of a high color, and the stools never have a normal appearance in smell, color, or consistence; worms are sometimes found in the stools and vomitings, and they spontaneously appear through the anus or the mouth; the exacerbations become milder and more abridged as the pyrexia declines; moisture generally appears upon the surface; the pulse falls; the appetite and refreshing sleep return; a copious sediment deposits from the urine, and the alvine excretions have become more healthy. The complaint continues from one to three weeks, and occasionally longer.

VARIETY II.—*Slow Infantile Remittent.*

There is a variety of infantile remittent which makes its assault more insidiously and imperceptibly, and by way of distinction it is called the slow variety. In this form the breath is offensive, the appetite is fastidious, the abdomen frequently enlarged, and the flesh is gradually wasted; it has but one exacerbation, which comes on in the evening, continues until morning, and is then succeeded by a profuse perspiration; hectic flushings are frequent through the day, the skin is dry and harsh, the pulse about 140 in the exacerbation, and about 100 in the remission. The patient is rarely so much indisposed as to be confined to bed; nevertheless, it is not inclined to be active or playful, but is indolent, listless, and complains of an aching of the limbs when motion is attempted. It is often considerably disposed to doze both day and night; to pick its nose; the urine is of a deep orange color; the thirst is but little; the appetite is absent; the tongue is white and moist, and the stools, as in the former, or acute variety, are unnatural. At the commencement of a favorable termination, all the symptoms abate, and health and cheerfulness return. The continuance of this form of disease may be of two or three months.

VARIETY III.—*Low Infantile Remittent.*

This form resembles very closely, for the first week, the acute variety, except that it begins, pretty uniformly, in a sudden manner, and afflicts the brain more severely, often to the production of delirium. Its peculiar character now commences by an exhibition of indifference to all that surrounds it; it calls for nothing, and yet refuses neither food nor drink when presented to it; the superior extremities are usually, during its waking hours, kept in constant motion, while its inferior continue in a fixed posture. When the disease has attained to its most oppressive stage, such is the debility that the patient loses the power of speech, and its jaws occasionally become fixed and immovable. During the exacerbations it slumbers much; the eyes are dull, inattentive, and flushed when the stage begins; the tongue, teeth, and lips are covered with a blackish fur; the facial expression betrays much distress, and during the remissions much restlessness becomes apparent by the constant motion of its arms. Before a discharge of fæces or flatus, it becomes restless, and, though sensible, the cystic and alvine excretions are passed involuntarily. In the remission, the pulse is about 100, but in the exacerbation it rises to 120. When the exacerbations become shorter and milder, a favorable turn is supposed to have commenced, and if so, the drowsiness will be reduced, the eyes will become clearer, the expression more placid, the pulse more calm, the tongue more clean, and the appetite improved; it gradually becomes to betray some fretfulness, the speech and voice return, but the urine is still passed involuntarily—weakness is the only matter of complaint, and this is finally overcome. This form may continue six weeks, or even longer.

Causes.—Upon this subject there has existed considerable contrariety of opinion. At one time it was attributed by many to the presence of worms; so much so was this the opinion that Hoffman was greatly surprised when he did not find worms in connection with this disease. At that day the disease was familiarly called "worm fever." Something like a hundred years since, an Edinburgh physician questioned the doctrine, and showed that worms were not always the cause of this fever. Dr. Butter, in 1782, in his work on this fever, attributed the disease to debility, derangement, etc., of the digestive organs. He was of the opinion, however, that worms were of advantage to the system—and even Dr. Rush was much inclined to the same view of the subject. At the present time, the profession is generally of the opinion that Butter's views, in the main, are correct. In France, it is considered as a species of gastro-enteritis. It occurs both sporadically and epidemically. In the latter form, it is produced, probably, in organically liable constitutions, by some of the usual causes of fever. Dr. Sims reports one epidemic of it as prevailing simultaneously with a low grade of nervous fever among adults (Cy. Prac. Med.).

Diagnosis.—Dr. Sims, above cited, was of the opinion that it was impossible to distinguish this fever from hydrocephalus in patients under five years of age; but Pemberton is of a contrary opinion. He thinks, that the screaming of the patient during sleep, strabismus, tossing of the hands over the head, intolerance of light, and the disturbed condition of the intellectual faculties, which characterize hydrocephalus, will distinguish it from this form of fever, in which there is no strabismus, no derangement of the intellectual faculties, and but very seldom any screaming during sleep or any intolerance of light. Furthermore, says Dr. Golis, hydrocephalus is attended by no distinct stages, its pulse never falls below the normal standard, and it never extends from three to six weeks.

PROGNOSIS.—Although this is a troublesome and tedious disease, it can not be thought very liable to any unfavorable termination, more particularly under a judicious practice. In fatal cases the intestines have been found greatly distended and the mesenteric glands somewhat enlarged, but neither inflammation nor effusion has been detected in the abdominal cavity. The fact that this fever is somewhat liable to pass into hydrocephalus, constitutes its most dangerous feature. When such a tendency exists, it is usually indicated by sickness and vomiting in the beginning.

TREATMENT.—At the commencement of the disease, when the stomach is loaded with undigested food, or before gastric irritation has taken place, a light emetic will usually be found advantageous. This should be followed by an active purgative, as the Compound Powder of Jalap, which is probably the best agent that can be used, often exerting a beneficial influence over the disease sufficient either to put an end to it at once, or greatly mitigate its subsequent severity.

After the bowels have been freely acted upon, should the fever continue, small doses of Leptandrin, with or without Podophyllin, or if there be gastric acidity, Leptandrin combined with the Compound Powder of Rhubarb, or Syrup of Rhubarb and Potassa, should be administered in doses sufficient to cause one, but not to exceed two daily evacuations from the bowels; and in cases of excessive irritability of the stomach, in which these agents are rejected, active cathartic injections must be used.

Gastric irritability may be overcome by mild mucilaginous draughts of a diuretic nature, as Marsh-Mallows, to be aided by external applications, as sinapisms to the epigastric region and spinal column. Spasmodic action will usually yield to the Tincture of Lobelia and Capsicum, aided by warm baths, especially if it amounts to actual convulsions. Probably the Tincture of Gelseminum might be of service when these symptoms are present. When great determination to the head is manifest, cooling lotions must be frequently applied, together with warmth and counter-irritation to the inferior extremities and spinal column.

As soon as the stomach can retain medicine, anti-periodics must be given continuously every few hours, until the solution of the disease; the following is perhaps equal, if not superior, to any other for this purpose:

R.· Powder of Ipecac. and Opium, ℈ss,
S. Quinine, ℈j. Mix.

Divide into ten powders, and, to a child two years old, give one powder every four or five hours.

As soon as convalescence takes place, the mild bitter-tonics, as Hydrastin, Cornin, etc., must be given, and their use continued, until the strength and appetite are restored. The diet must be very light, and increased as the restoration to health advances. Oftentimes, when this disease is very obstinate, a removal to the country or change of climate will effect an immediate beneficial result.

TYPHOID AND TYPHOUS FEVERS.

We here present to our readers the investigations of Dr. W. Jenner, in relation to these two febrile forms of disease, which we regard as an excellent analysis, and of much value to the practitioner:

On Typhoid and Typhous Fevers. An attempt to Determine the Question of the Identity or Non-Identity, by an Analysis of the Symptoms, and of the Appearances found after Death, in Sixty-Six Fatal Cases of Continued Fever, observed in the London Fever Hospital, from January, 1847, *to February*, 1849. By W. Jenner, M.D., Professor of Pathological Anatomy in University College, London.—This is the title of an extremely interesting paper which has been published in successive numbers of the Monthly Journal of Medical Science, commencing in the number for April of last year, and concluded in the number for April of the present year. It constitutes one of the most important contributions to the history of continued fever that has yet been made, presenting, as it does, the carefully recorded histories of a very large number of cases, admirably arranged and analyzed, by a highly competent and reliable observer.—*Amer. Jour. Med. Sci.*, for 1850.

"*Age.*—Typhoid fever was limited, in the cases here considered, to persons under 40 years of age; nearly one-third of the forty-three cases of typhous were more than 50 years of age.

"*Mode of attack.*—As a general rule, the attack of typhoid fever commenced more insidiously than that of typhous fever.

This observation, like all others in this paper, applies, of course, only to fatal cases.

"*Duration.*—The average duration of the fatal cases of typhoid fever was 22 days. Of the fatal cases of typhous fever, 14 days. Half the cases of typhoid fever survived to the 20th day of the disease. Not a single case of typhous fever survived the 20th day of disease.

"*Eruption.*—The difference in the appearance of the eruption in the two diseases was as great as it well could be, considering that both were of a reddish hue.

"*Miliary vesicles and sudamina.*—These vesicles were present in an equal proportion of the cases of both diseases under 40 years of age. But in no cases of typhous fever, more than 40 years of age, were they detected.

"Subsequent experience leads me to believe that miliary vesicles are rarely seen on individuals more than 40 years of age; and very rarely, indeed, if ever, on patients more than 50 years old. I have, during the last year—*i. e.*, since my attention was directed to this point—seen these bodies on no one of the many patients more than 50 years of age, laboring under various diseases, that have come under my observation.

"*Expression, manner, hue of face, etc.*—As the rule, in the cases of typhoid fever here analyzed, the expression was much less indicative of prostration, and more anxious, than in cases of the typhous fever. In the former disease, the complexion was tolerably clear, and the flush, when present, was of a bright-pinkish color, limited to one or both cheeks, and often distinctly circumscribed. In typhous fever, on the contrary, the complexion was thick and muddy, the flush of the face uniform, and of a dusky-red color.

"*Headache* was a constant symptom in all the cases of typhoid and typhous fevers; but it disappeared about the 10th or 12th day in the latter, and not until the termination of the second, or the middle of the third week, in the former.

"*Delirium* commenced in three only of ten cases of typhoid fever before the 14th day; while it began in fourteen out of fifteen cases of typhous fever before the 14th day. As a rule, the delirium was decidedly more active in typhoid than in typhous.

"*Somnolence.*—In eight out of nine cases of typhoid fever, somnolence commenced after the 14th day of disease. In seventeen out of eighteen cases of typhous, before the termination of the second week.

"*Coma-vigil.*—One-fifth of the cases of typhous fever experienced coma-vigil; not a single case of typhoid fever experienced that condition.

"*Spasmodic movements* were nearly equally frequent in the two diseases

"*Retention of urine and involuntary discharge of urine and stools* occurred with equal frequency in the two diseases; but at a much earlier date in typhous than in typhoid fever.

"*Loss of muscular power.*—Little more than a fourth of the patients attacked with typhoid fever kept their beds entirely before the seventh day of disease. All the patients affected with typhous, whose cases are here considered, took altogether to their beds before the seventh day of the disease.

"The prostration was rarely so extreme in the cases of typhoid fever as in those of typhous fever. Extreme prostration, when it did occur in typhoid fever, was not observed until from the 14th to the 30th day, while in a large majority of the cases of typhous fever it was marked between the 9th and 12th day of disease.

"*Epistaxis* was present in five of fifteen cases of typhoid fever—in not one of twenty-three cases of typhous fever.

"*Hearing* was equally and similarly affected in the two diseases.

"*Eyes.*—The conjunctivæ were *very much* more constantly and intensely injected in the cases of typhous than in those of typhoid fever; the pupils were absolutely larger than natural in a majority of the cases of the latter disease, while these were abnormally contracted in a large majority of the cases of the former affection.

"*Tongue.*—Although individual cases of the two forms of disease may have closely resembled each other in the appearance of the tongue, yet, taking the whole of either group of cases, this organ presented a singularly different aspect in the one from what it did in the other. It was much more frequently moist throughout the disease in typhoid than in typhous fever. When dry, it was often red, glazed, and fissured, in the former; but rarely so in the latter.

"Again, in typhoid fever, when the tongue was brown, its hue was much less deep—it was of a yellowish, instead of a blackish brown. The small, dry tongue, with red tip and edges, smooth, pale, brownish-yellow fur, fissured—the surface seen between the fissures being red—may be considered differentially as a diagnostic sign of typhoid fever. One only of the twenty patients affected with the typhoid fever, but eight of the forty patients laboring under typhous fever, were unable to obtrude the tongue when bidden.*

"*Intestinal hemorrhage* occurred in one-third of the patients

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"* This clearly indicates the difference in the amount of prostration in the two diseases.

laboring under typhoid fever—in none of those suffering from typhous fever.*

"The other abdominal symptoms and signs need no recapitulation.

"*Appetite and thirst.*—No difference in the two diseases.

"*Pulse.*—The frequency of the pulse fluctuated much more, from day to day, in the case of typhoid than in those of typhous fever.

"*Cough and physical chest-signs*—Sonorous rale was very much more frequently present in the cases of typhoid than in those of typhous fever—*i. e.*, it was present in eleven out of twelve cases of the former, and in seven only of twenty-one cases of the latter. Dullness of the most depending part of the chest, from intense congestion of the lung, was observed in nine cases of typhous fever—in no case of typhoid fever.

"*Sloughing* appeared to be nearly equally frequent in the two diseases.

"*Erysipelas* occurred in seven of the twenty-three—*i. e.*, in nearly a third of the cases of typhoid fever; and in two only of the forty-three cases of typhous fever—*i. e.*, less than one-twentieth of them.

"*Discoloration of the walls of the abdomen, and of the skin covering the larger veins*, was much more frequently present in those dead from typhous than typhoid fever.

"*Emaciation* had made greater progress in the typhoid than in the typhous subjects.

"*Spots.*—The spots observed during the progress of the cases of typhous fever continued after death; no trace of the spots visible during life could be detected after death from typhoid fever.

"*Head.*—After typhoid fever, the pia mater and arachnoid separated from the convolutions with abnormal facility in one only of nine cases examined with reference to the point. The vessels of the pia mater were abnormally filled with blood in one-third of the cases, but intensely congested in one only of fifteen cases. After typhous fever, the pia mater and arachnoid separated with abnormal facility in nine of eleven cases of which notes on this point were made. The vessels of the pia mater were congested in nearly half, and intensely congested in one-fifth, of the whole of the cases; while the cerebral substance itself was abnormally congested in half.

"* I may here remark, that in one case only of typhoid fever, received into the London Fever Hospital during the last three years, has blood passed from the bowels. The case referred to was that of an old man who had hemorrhoids, which occasionally bled when he was in health. During the time specified, notes of near two thousand cases have been taken.

"*Hemorrhage into the cavity of the arachnoid*, which was not found in a single case of typhoid fever, had occurred before death in one-eighth of the cases of typhous fever.

"The amount of serosity found within the cranial cavity was decidedly greater after typhous than typhoid fever.

"*Pharynx.*—After typhoid fever, this organ was found ulcerated in one-third of the cases. After typhous fever, ulceration of the pharynx was not to be detected in a single case.

"*Larynx.*—Ulceration of the larynx was found in one of fifteen subjects dead from typhoid fever—in one of twenty-six from typhous fever.

"*Esophagus.*—After typhoid fever, ulcerated in one of fifteen cases in which it was examined. After typhous fever, the esophagus was free from ulceration in all the twenty-four cases in which it was examined.

"The epithelium separated from the esophagus spontaneously at an earlier period after death from the latter than the former disease.

"*Stomach.*—In none of the fifteen cases examined after death from typhoid fever was the mucous membrane of the stomach softened throughout its whole extent; in no case did the softening of the cardiac extremity approach perforation.

"In four of thirty-seven cases of typhous fever, the whole mucous membrane of the stomach was softened; and in four others, there was such extreme softening of the whole of the coats of the great *cul-de-sac* that they were perforated by the slightest violence.

"*Small intestines and mesenteric glands.*—The presence or absence of lesion of these organs was the ground on which the cases of typhoid and typhous fever here analyzed were divided from each other; consequently they were invariably diseased in the one and normal in the other.

"*Large intestines.*—After death from typhoid fever, the mucous membrane of the large intestines was found ulcerated in rather more than a third of twenty cases. In no instance after death from typhous fever.

"*Peritoneum.*—As peritonitis was in typhoid fever secondary to, and dependent on, the entero-mesenteric disease, it may here be excluded from consideration.

"*Spleen.*—This organ was enlarged in all the cases of typhoid fever—softened in one-third of the cases only. Before the age of 50, it was as large after typhous as typhoid fever; after that age, it was decidedly smaller in the former than in the latter affection. After the age of 50, it was as soft in typhous as in typhoid fever; before that age, it was frequently softened.

"*Gall-bladder.*—There was ulceration of the lining membrane of the gall-bladder in one of fourteen cases of typhoid fever; in none of thirty-one cases of typhous fever. In the latter disease, the bile was much thicker and of a darker green color than in the former.*

"*Liver*, *pancreas*, *kidneys*.—These organs were more flabby in the cases of typhous than in those of typhoid fever.

"*Urinary-bladder*.—This viscus was ulcerated in one of the cases of typhoid fever—in none of the cases of typhous fever.

"*Pericardium*.—This cavity contained a small amount of yellowish, transparent serosity in all the cases of typhoid fever examined. The contained serosity was red, from transudation of a solution of hæmatosin, in five of thirty-one cases of typhous fever, in which the pericardium was examined before the termination of the fever.

"*Heart*.—The muscular tissue of this organ was much more frequently and decidedly flabby, and its lining membrane was much more frequently and deeply stained of a dark-red color, in the cases of typhous fever than in those of typhoid fever.

"*Lungs*.—Granular and non-granular lobular consolidation were very frequent in the subjects dead from typhoid fever; rare in those dead from typhous fever. The reverse was the fact with reference to consolidation from conjestion of the most depending part of the lung.

"*Pleura*.—Recent lymph or turbid serosity was found in six of fifteen cases of typhoid fever—*i. e.*, between one-half and one-third, or in the proportion of forty per cent. The same lesions, but much less in amount, were found in two only of thirty-six cases of typhous fever—*i. e.*, one-eighteenth, or in the proportion of 5.5 per cent.

"The particulars here briefly recapitulated, appear to me to prove indisputably that the symptoms, course, duration, anatomico-pathological lesions, and the tendency to cadaveric changes, are different in typhoid fever to what they are in typhous fever.

"To account for the differences in symptoms which exist in continued fever, with or without entero-mesenteric disease, the following assertions have been put forward:

"1. That typhoid fever is merely typhous fever complicated with lesions of a particular organ; and, therefore, it is to be expected that certain symptoms referable to, and dependent on that lesion, will be present, and so far modify the symptoms of the disease. If the symptoms and signs referable to the intes-

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"* The condition of the bile, as found after death in these two diseases, is worthy of more careful investigation. The difference in appearance is, in a large majority of cases, well marked.

tinal disease as a cause—*i. e.*, the condition of the tongue, the diarrhea, increased resonance, and fullness of the abdomen, gurgling in the iliac fossa, pain and tenderness in the same region from the fluctuation of the contents of the bowel—were the only symptoms by which typhoid fever was separated from typhous fever, although the idea might cross the mind that they were two diseases, no sufficient ground for their separation would be present, unless the specific cause of the one was proved to be different from that of the other. But, putting aside the symptoms strictly referable to the abdominal lesion, the general symptoms of the two diseases, in the cases here analyzed, differed widely; such differences having no apparent connection with the local affection, but being probably, like it, dependent on some common cause acting on the whole system simultaneously.

"Thus the remarkable difference in the kind, not simply the amount, of the rash in the two diseases; and the tendency to local inflammations, to erysipelas, and to ulceration, observed in the cases of typhoid fever here analyzed, can not, with any show of reason, be considered to have been dependent on the disease of Peyer's patches—*i. e.*, in the same way as the abdominal signs undoubtedly were; and it is to be carefully borne in mind that the external, the hygienic conditions of either group of cases were precisely the same in all respects. They occupied the same wards, partook of the same diet, slept on the same beds, under the same amount of clothing, and had the same physicians to attend them, and the same nurses to wait on them.

"Moreover, of the symptoms common to the two, the headache continued longer, and the delirium and somnolence came on, as we have seen, much later, in typhoid than in typhous fever; and the delirium, too, possessed a more active character. These differences, also, can not be explained by the presence of intestinal disease in the former, and its absence in the latter affection.

"The short comparative duration of the cases of typhous fever here considered, is another remarkable point of difference, totally inexplicable by the hypothesis that typhoid fever is typhous fever with intestinal ulceration. Had the cases eventually recovered, it might have been said that the intestinal lesion prolonged the disease in the cases of typhoid fever; but that all the fatal cases of fever, with a local lesion of so severe a nature as that recorded to have been present in the cases of typhoid fever, should have had a much longer course than all those other fatal cases of fever in which no organic change of structure could be detected after death, appears to me inexplicable, on the supposition that the former is simply the latter disease, with this serious lesion superadded. Let me repeat, by this hypothesis we are asked to imagine that death is retarded in fever by extensive ulceration of the small intestines, and enlargement, softening, and even suppuration of the mesenteric glands. Surely, it behooves the supporters of such a statement to bring forward cogent proofs of the identity of the specific cause of the two affections ere they ask us to admit its truth.

"The same mode of reasoning appears to me equally conclusive, when we consider the comparatively early period of the disease at which the patients suffering from fever lost the ability to make muscular exertion. For, to suppose that the presence of abdominal complication in fever invariably prevented the extremely early supervention of debility is, *a priori*, still more absurd than to suppose such lesions to have retarded death. How, again, are we to explain, if we regard typhoid as typhous with abdominal complication, the differences observed in the ages of the patients; in their general manner; the muddy hue of the skin and uniform flush of the face, the injected conjunctivæ and contracted pupils, in typhous fever; and the comparatively clear complexion, the pink flush limited to the cheeks, the pale conjunctivæ, and the large pupils, in typhoid fever?

"In what way, also, are we to account for the differences observed in the physical breath-signs, on the supposition that the one is merely the other with abdominal complication?

"Death itself, moreover, adds new proof to the non-identity of the general affection in the two diseases. The comparatively rapid loss of muscular rigidity, the discoloration of the surface, the more flabby condition of the heart, liver, and kidneys, the extreme softening of the stomach, and the early separation of the epithelium, after typhous fever, are all cadaveric changes, by which death makes us cognizant of a condition of the system at large, which condition must have existed anterior to the cessation of life from that disease; and which condition could not have been present in the cases of typhoid fever, or death would have made it manifest.

"I need not here more than advert to the differences observed in the lesions which death simply enabled us to lay bare. The almost constantly-congested brain and membranes in typhous fever; the frequent presence of the signs of pre-existing serous inflammation in typhoid fever; the difference in the nature of pulmonary lesions in the two—are inexplicable on the supposition that the one disease is the same as the other, excepting so far as concerns the abdominal affection.

"Thus tried by facts—*i. e.*, by recorded symptoms and lesions—the assertion that typhoid fever is merely typhous with abdominal complication, is completely refuted.

"2d. But another mode of explaining the differences which exist between the two diseases have been given—*i. e.*, that the differences observed depend on variations in the epidemic constitution. These cases afford a complete answer to this assertion. For a majority of the cases here analyzed of both diseases were observed during the same epidemic constitution. If the reader will refer to vol. xix, p. 668 Amer. Jour. Med. Sci., he will find that nineteen of the cases of typhous fever I have used were collected between May and November, 1848; and that thirteen of the cases of typhoid fever were collected during the same months of the same year. For such as prefer broad, general assertions to the details of a particular but more limited facts, I may remark, that during the three years' attentive watching of nearly all the cases admitted to the London Fever Hospital, in which time there have been epidemics of relapsing fever, typhous fever, and cholera—and, consequently, according to those whose opinions I am here examining, as many changes in epidemic constitution—I have seen no alteration in the general or particular symptoms of either typhous or typhoid fevers, or the lesions observed after death from either—*i. e.*, from November, 1846, to November, 1849. The cases of typhoid fever—which disease is rarely absent for a fortnight from the wards of the hospital—preserved their symptoms unchanged, and presented the same lesions, whatever the epidemic constitution that prevailed; the same is true of typhous fever. Cases of the latter disease are also rarely absent from the wards of the same institution. It is there common to see patients occupying beds side by side, and presenting respectively the well-marked characters of either disease.

ART. II.– *Lecture on Mercury.* By Prof. H. D. GARRISON, M. D.

GENTLEMEN:—Having discoursed to you in former lectures, of the metals of the alkalies and alkaline earths, and of the more base of the metals proper, I wish to-day to direct your attention to a group of metals, which, on account of their feeble affinities, have been denominated "noble metals;" and especially to the first of the group—MERCURY.

It may, indeed, seem inconsistent, that we, who reject the mercurials in toto, should request you to give the subject even a passing notice. But, to my mind, this is the strongest reason why you should give the subject the most thorough and careful investigation. You have no moral right to either encourage or discountenance the use of any remedy without having some positive knowledge of its merits or demerits; and the assumption of such unwarrantable right, by virtue of a wisely-ordained etiquette of science, invariably excommunicates the offender from all the higher circles of science, and marks him as an object only worthy of just contempt. But, aside from these considerations, as chemists, as students of nature, you are required to carefully investigate every element and compound in nature. You must *follow* truth, strictly, constantly, energetically, and worship only at her shrine; but never expect her to follow you, remembering that she turns not aside to favor any individual, sect, or party.

Mercury was denominated, in the palmy days of Alchemy, "Argentum vivum;" but more modern nomenclaturists assigned it the cognomen "Hydrargyrum," while, in common parlance, it is usually termed Quick-silver, or Mercury. All of these names refer to its remarkable mobility and silvery luster. Cinnabar is the most common ore of mercury, but the iodide, protoxide, and even metallic mercury occur in small quantities. Spain and Austria formerly supplied most of the civilized world with this metal, but important mines have lately been opened in California. The atomic weight of mercury has given rise to considerable discussion among chemists, and to dangerous confusion in the nomenclature of its compounds. It is either 202 or 101. If we accept the latter number, then calomel is the dichloride (Hg_2 Cl), and corrosive sublimate the protochloride (Hg Cl). But if the former number be received, then calomel must be termed the protochloride (Hg Cl), and corrosive sublimate the Bichloride (Hg Cl_2). In addition to the usual data employed in the determination of equivalents, the electrolytic relations of the mercurials have long induced me to accept, as the true combining proportion, the smaller number (101). The symbol of this element is Hg.

being derived from Hydrargyrum and its specific gravity at 62° Fah. 13.5. At —39° mercury becomes a malleable solid, and may even be obtained in fine octohedral chrystals. It is volatile at all temperatures above 32°, as is demonstrated by its action upon gold leaf, suspended over it in a close vessel. Its vapor is in a high degree inimical to both animal and vegetable life; therefore, it should not be spilled in an apartment occupied by man. Even the breaking of a thermometer in a bed-chamber has given rise to serious disease. At 662° it boils, being rapidly converted into colorless vapor. Of course, mercury, like all other elements and compounds which volatilize readily, may be distilled. Its use in the construction of the thermometer and barometer, etc., have already been explained in a former lecture. On account of its high specific gravity, mercury has been employed in large quantities as a mechanical remedy in cases of Intussusception of the bowels. This practice, usually unsuccessful, may greatly aggravate the original difficulty, or even rupture the bowels, and must therefore be deemed reprehensible.

Mercury forms two distinct classes of compounds, which may be termed *mercurous* and *mercuric*, for the same reason that the compounds of iron are divided into ferrous and ferric, and those of copper into cuprous and cupric.

Oxygen combines with mercury, forming two compounds—the dinoxide $Hg_2\ O$, and the protoxide Hg O. The first of these oxides may be prepared for examination by adding caustic potassa to calomel. The reaction is very simple. $Hg\ 2\ Cl+KO=Hg_2\ O+K\ Cl$. The chloride of potassium may be removed by washings with cold water. Dinoxide of mercury is a heavy, black powder, whose tendency to decompose into the protoxide and free mercury is remarkable,—this change being effected rapidly in the light, and even by brisk rubbing in a mortar. It is a feeble base, forming, with most of the acids, well defined salts.

It is reduced to the metallic state from all of its soluble combinations by phosphorous acid, sulphurous acid, protochloride of tin and metallic copper. All of its solutions are precipitated black by hydro-sulphuric acid, and by alkaline sulphides.

The protoxide of mercury Hg O, termed also red oxide, mercuric oxide, red precipitate, etc., is formed either by heating the metal to about 600° in the air, when it forms readily, or by heating any of the nitrates of mercury until all of the nitric acid is evolved. If a nitrate of the dinoxide should be chosen, that oxide will be raised to the state of a protoxide at the expense of the nitric acid. Too high a heat is to be avoided, since a temperature a little below redness effects complete decomposition of this oxide,—thus illustrating the remarkable influence of heat in determining the affinities of bodies. I have already had occasion to point out to you the fact that compounds containing one equivalent of each of their constituents are generally more stable than those otherwise constituted. The mercurial oxides afford another exemplification of this law. As prepared by the first process, the protoxide of mercury was denominated by the earlier chemists, "Oxydum hydrargyri rubrum per se;" a name which is as characteristic of the verbosity of alchemy, as it is opposed to the conciseness of modern nomenclature. As prepared by the second process, the compound is known in pharmacy as red precipitate; a name most absurd, since the oxide prepared by *precipitation*, although isomeric with this, is of a *lemon-yellow* color. The yellow variety was formerly regarded as a hydrate of the red, but must now, since they are known to be identical in composition, be viewed as oxide of mercury in its allatropic condition. The red variety forms with chlorides, compounds which are very dissimilar in properties to isomeric oxychlorides formed by the yellow oxide. It is, however, to be remarked, that the salts formed by the oxide in both conditions are precisely similar. The red variety appears as a heavy, slightly crystalline, gritty powder, of a brick-red color. It is slightly soluble in water, forming a feebly alkaline solution. When finely pulverized, it becomes yellow. The *neutral* salts of this oxide are colorless, provided the acid is not colored; but all of the *basic* salts are yellow. The fixed alkalies precipitate this oxide in its yellow condition from all of its salts, but ammonia forms with it a compound known as "white precipitate." Hydrosulphuric acid and the alkaline sulphides, if added in excess to its salts, give a black precipitate of protosulphide HgS; but if added in very small quantities, white compounds of the sulphide of mercury and the original salts are produced. If the precipitated oxide is digested for several days in aqua ammonia, it becomes of a light yellowish color, and now presents strong basic properties. It has, indeed, combined with new elements contained in the ammonia, and may now be termed the hydrated oxyamide of mercury $2\,Hg\,O + Hg\,N\,Hg_2 + 3\,HO$. If dry ammoniacal gas is passed over the protoxide of mercury, double decomposition ensues, thus: $3\,Hg\,O + N\,H_3 = N\,Hg_3 + 3\,HO$. This new compound, which may be regarded as mercurial ammonia, is quite as explosive as the iodide of nitrogen, of whose dangerous instability you had ample experimental proof in a former lecture.

Chlorine, like oxygen, forms with mercury, two compounds—the mercurous, or dichloride, and the mercuric, or protochloride. The first of these compounds has been the recipient of a most lavish expenditure of names. At different times, and for various reasons, it has been termed Chloridum mite, Calomelas, Draco mitigatus, Submurias hydrargyri mitis, Submurias hydrargyri sublimatum, Mercurius dulcis, Mercurius dulcis sublimatus, Mercurius dulcis precipitatus, Panacea mercurialis, Murias hydrargyri dulcis sublimatus, Mercurius sublimatus dulcis, Aquilla, Manna metallorum, Panchymagogum minerale, Panchymagogum quercetanus, Calomel, Mild chloride, Subchloride, Protochloride and Dichloride of mercury. Notwithstanding this startling array of names, the compound in question is really a very simple substance, consisting of two equivalents of mercury (202 parts by weight) combined with one equivalent (35½ parts by weight) of chlorine, and should be denominated, as its composition indicates, the dichloride of mercury. It may be prepared by the direct union of its elements, but much more easily by the precipitation of any of the salts of the dinoxide by means of hydrochloric acid or the chloride of sodium. The United States Pharmacopeia directs sulphate of the protoxide of mercury, free mercury, and common salt, to be well rubbed together and sublimed. The reaction may be thus stated: $HgO,SO_3 + Hg + Na\,Cl = Hg_2\,Cl \times NaO,SO_3$. In this case, sulphate of soda, which is a fixed salt, remains in the retort, while calomel passes over as sublimate. To free calomel from a small quantity of corrosive sublimate sublimed with it, the most thorough washing is necessary. When properly prepared, calomel is a beautiful white powder, devoid of taste and odor. By most chemists, it is regarded as *absolutely insoluble*. I have already demonstrated to you, that many of the so-called insoluble salts are not absolutely such. But the highest degree of solubility that can possibly be admitted for calomel, will not exceed one part of the salt in two hundred and fifty thousand parts of water; or, more simply, one grain in a little more than forty-three pounds of water.

The insolubility of calomel has been the fruitful source of much earnest, and, it may be added, angry disputation in the profession in regard to its *modus operandi* when received into the stomach. Some have strongly contended that in the *primæ viæ*, calomel is converted into dinoxide; but do not, for the very sufficient reason that they can not, adduce a single proof of this reaction. But, if it be admitted that such change may be effected, the *modus operandi* of the article is by no means explained; for the dinoxide is quite as insoluble as the dichloride, and therefore can only act mechanically, since no insoluble element or compound can enter the circulation. A more plausible view of the matter—a view not only sustained by possibility, but founded upon actual research—is, that under many different circumstances, a portion of the dichloride is converted into the protochloride or corrosive sublimate, which is freely soluble. The uniform tendency of binary mercurous compounds to become mercuric, together with the remarkable uncertainty attending the therapeutic action of calomel, forcibly suggests an explanation of this character. It is well known that, under circumstances *apparently similar*, it may require "a dose of castor oil to work it off;" or may operate as an ordinary cathartic; or may prove a most virulent poison, destroying the patient in a few hours, and giving rise to all the symptoms of poisoning by corrosive sublimate. It is true that such deplorable consequences are rarely found on record, for physicians, caring more for their professional reputation than for the advancement of science, usually only publish such of their unsuccessful cases as they can not conceal. While successful treatment, illustrated by numerous, but often trivial cases, is heralded to the world by every scribbling sentinel with an air of immense scientific complacency. That calomel acts more vigorously when succeeded by, or mixed with, certain acids, or common salt, is a fact too popularly known to require scientific confirmation. But it has been shown beyond the possibility of a doubt, by M. Mialhe and other investigators, that calomel, in the presence of free hydrochloric acid, or of alkaline chlorides, is, to a small but very appreciable extent, converted into corrosive sublimate. Do you ask why every dose of calomel does not produce fatal results? I answer, that if this reaction does occur, as numerous cases and actual experiments seem to demonstrate, nearly every dose would prove fatal were it not that other compounds—pepsin and the various peptones—interpose themselves, form insoluble, and hence inert, compounds with the corrosive sublimate, and thus rescue the vital organs from the impending danger. That pepsin and the various peptones do form insoluble compounds with the protochloride of mercury, has been demonstrated often by such illustrious investigators as Bidder, Schmidt, Mialhe, Liebig and Lehmann. With these data before us it is not difficult to at least hypothecate an explanation of the multifarious and uncertain action of calomel. Thus the presence of free hydrochloric acid, alkaline chlorides—in short, of anything which may, by mutual reaction, by predisposing affinity, or by catalysis, accelerate the conversion of calomel into corrosive sublimate, will increase the activity of the remedy. On the other hand, either the partial or entire absence of these agents, or a superabundance of pepsin or peptones will, in a corresponding degree, diminish, or entirely negative, the immediate action of the remedy. According to this view, any degree of inertness or intensity of action may be satisfactorily explained. Just here an important question is suggested. Are we in possession of any knowledge, by means of which we can decide *positively* as to the *quantity* or *quality* of the contents of the stomach? With profound regret, but with perfect assurance, I answer, we are not. Moreover, the gastric juice is subject to great fluctuations, both as regards quantity and quality, while, in even a slightly diseased stomach, lactic and butyric fermentations are exceedingly common. Therefore, suppose the contents of the stomach to be accurately known at the time of the exhibition of this remedy, can the practitioner assure himself that a fatal chemical change will not be wrought in an hour? These premises being fixed—as we believe they are—it follows, that no man can, in the present state of science, predict, with any degree of certainty, the effect of even a very small dose of calomel. Is the administration of such a remedy, under such circumstances, indicated by humane motives, or sanctioned by science? Let common sense, and the victims of its health-destroying caprices, give the response.

You may determine the presence of calomel by means of caustic potassa, which gives with it a black precipitate of dinoxide of $Hg_2 O$. Hydrosulphuric acid and the alkaline sulphides, also give with calomel a black precipitate, which is the disulphide $Hg_2 S$. If calomel is moistened, and rubbed briskly upon a clean copper coin, decomposition by substitution is effected, whereby the coin becomes amalgamated. This test may be termed generic, since it positively indicates the presence of a mercurial compound, but fails to point out the special one, because all compounds of mercury act similarly. If digested in aqua ammonia, calomel becomes black, and is converted into an Amido-chloride $Hg_2 Cl + Hg_2 NH_2$.

The proto-chloride of mercury $Hg Cl$ is also termed corrosive sublimate, bichloride of mercury, muriate of mercury, etc. As indicated by its name, it is composed of one equivalent of each of its constituents. It forms, either from its solution or by sublimation, fine, colorless crystals, which are not isomorphous. It is freely soluble in water, alcohol and ether. As a poison, it is scarcely less virulent than arsenious acid, and indeed acts upon the animal organism in precisely the same way. They both combine with the albuminoid and nervous tissues, forming firm compounds, which are *insoluble*, and therefore not susceptible of further chemical change. It is thus these poisons arrest the progress of that great main-spring of life—CHEMICAL ACTION. The most that we can expect from an antidote is, to neutralize any portion of the poison that may still remain in the stomach. As an antidote to corrosive sublimate, nothing is better than the white of eggs, which is nearly pure albumen. In cases of emergency, however, fresh milk or the alkaline bicarbonates may be given. The presence of this chloride is easily detected by the following tests:—Ammonia and its carbonate form with it a white precipitate. Hydrosulphuric acid and the alkaline sulphides give a black precipitate, insoluble in nitric acid. The fixed alkalies give a yellow precipitate of the protoxide. The protocarbonates of soda and potassa give a brick-red precipitate, but the bicarbonates form a white precipitate, which afterward becomes red. A solution of iodide of potassium, if not added in excess, gives a fine scarlet precipitate of the protoiodide of mercury.

Metallic copper reduces the mercury to the metallic state upon its surface by substitution. Gold can not effect this reduction alone, but in contact with a baser metal, as iron or zinc, it forms a miniature Voltaic battery, by which the chloride is decomposed; the mercury appearing as a grayish-white spot upon the gold, which is the negative plate.

The compound sometimes termed "white calx of mercury," but generally white precipitate, is formed by adding aqua ammonia to a solution of this chloride. It is a double salt, consisting of the chloride and amide of mercury combined $HgCl + HgNH_2$. It may be readily known from calomel by not being blackened by caustic potassa.

Bromine forms with mercury a dibromide Hg_2Br and a protobromide $HgBr$, which are so strictly analogous to the corresponding chlorides in physical and chemical properties, that no further description of them is necessary. The diniodide of mercury Hg_2I, a greenish insoluble powder, is easily prepared by triturating together, in a mortar, its elements in the proper combining proportions, with a few drops of alcohol. The protoiodide of mercury, a fine scarlet-red powder, may be prepared by adding the iodide of potassum to corrosive sublimate in solution. It is quite soluble in an excess of either of the reagents, but very difficultly soluble in pure water. Only one cyanide of mercury is known in the protocyanide HgC_2N which resembles the protochloride in appearance, solubility and poisonous properties.

The disulphide of mercury Hg_2S, is an insoluble, black powder, which is easily decomposed into free mercury and the protosulphide HgS. This latter compound is known in the arts and commerce as cinnabar, or vermillion, and owes its chief value to its fine scarlet color. The same compound prepared by precipitation, is very black.

As there are two basic oxides of mercury, so there are two classes of salts—the mercurous and the mercuric. Only a very few, however, of the most important salts can now be noticed. The carbonate of the dinoxide $Hg_2O\ CO_2$, is a beautiful white powder, soluble in carbonic acid water. The sulphate of this oxide Hg_2O, SO_3, is a colorless salt, forming fine prismatic crystals, soluble in five hundred times their weight of water. The nitrate of the dinoxide $Hg_2O + NO + 2HO$ may be obtained by the action of nitric acid on mercury, in the form of fine, transparent, rhombic crystals. It is very soluble, but is decomposed by a large quantity of water. Several basic nitrates of this oxide are known.

The sulphate of the protoxide of mercury HgO, SO_3, may be prepared by the direct action of sulphuric acid on mercury or its protoxide. It is a white, crystalline salt, incapable of existing in solution; being decomposed by water into a basic salt, long known as "Turbith mineral $3HgO, SO_3$, and an acid sulphate $HgO, 3SO_3$. A neutral uncrystallizable nitrate, together with many complex basic nitrates and ammonio-nitrates, have long been known, but are so unimportant, in a practical point of view, as not to warrant a description of them at this time.

Mercury combines readily with most of the metals, producing alloys which have been specially designated Amalgams. These combinations can not be regarded simply as mixtures or solutions, since the elements are found to unite in definite proportions, forming, in some cases, well defined crystallizable compounds.

In our necessarily brief examination of the mercurials, you must have observed the following peculiarities:—

First. The poisonous properties of the entire class.

Secondly. That the virulence of any compound is in direct ratio to its solubility.

Thirdly. The remarkable instability of all the binary mercurous compounds, as Hg_2O, Hg_2Cl, Hg_2S, etc., and their uniform tendency to be converted into mercuric compounds and free mercury.

ART. III.—*A Rare Case.* By Prof. J. KING, M. D.

In the last days of September, 1859, a young man, aged 23, and who had heard considerable about the aphrodisiac properties of cantharides, procured some of the tincture of this article, and, for what purpose, it is unnecesary to state here, bathed the whole penis with it, repeating the application several times after each drying; he also pressed some of it into the meatus, so that it passed within to the extent of about a line. In about an hour after the last application, he experienced a great soreness in the organ, especially at the glans, which he at first attributed to friction of the part against his drawers; but as the soreness increased, with considerable heat and irritation, he was induced to examine, and found the whole surface of the glans and a portion of the body of the penis much vesicated, with a large pouch-like blister issuing from the meatus urinarius. He ruptured the vesicles to discharge as much of the contained fluid as possible, and then enveloped the organ in pieces of muslin, etc., in order to support it, prevent friction, and preserve his pants from being soiled with the discharge. In this state he remained until bed-time, (some four hours,) at which period he found more and larger blisters, and the organ very much swollen. Supposing olive oil would have a soothing influence, he applied it freely over the whole penis, and then wrapped it in a muslin cloth previously well oiled. In this state it remained all night, occasioning no uneasiness; nor was there any unpleasant feeling on the next morning until he attempted to urinate, when, the urine passing beneath the blisters, such an excessive pain was produced as to cause him to desist immediately; the agony caused him to become deathly pale, a feeling of great faintness came over him, and large drops of sweat oozed from every pore.

He now sent for me, and I found him still weak from the attempt at urination, but in other respects, excepting the condition of the organ itself, free from fever or any constitutional disturbance, and which, fortunately, continued throughout the treatment. The glans, frænum, and prepuce were well blistered, the latter being enormously large, resembling paraphimosis, and the vesication passed a short distance within the meatus. I passed a probe within the meatus to free it, and then gently introduced a piece of soft linen, moistened with elm mucilage, into the urethra, to the distance of about one-fourth of an inch. In an hour I removed this, when he passed urine freely, but with considerable burning pain, but, as he remarked, "by no means to be compared to the first attempt." After the urination, I passed another piece of linen, similarly prepared, into the urethra, to keep it free, and ordered an elm poultice, to which five grains of opium were added, to be applied around the whole organ; to be renewed at bed-time, and on the next morning.

During the treatment, considerable difficulty was met with in keeping the organ enveloped in the poultices, owing to the alternate states of erection and relaxation which occurred at irregular intervals; but by passing a bandage around the body, just above the hips, placing the organ within a bag containing the poultice, and fastening this to the bandage by means of straps of muslin attached both before and behind, much of the difficulty was obviated.

Sept. 27.—From a dread of the burning pain on urinating, the patient had taken no fluid on the previous day, and only urinated once after my visit, viz: at bed-time. Slept well through the night. This morning urinated with some burning; the prepuce and frænum enormously swollen; no pain; blisters still discharging. Introduced a strip of linen within the urethra, as before, and ordered a continuance of the poultices, two per day.

Sept. 28.—Urinated last night at bed-time, with considerable burning; slept well; urinated with great pain this morning, the fluid passing in several streams and in various directions. Prepuce somewhat lessened; removed some of the cast-off epidermis of the glans, which exposed a very dark-red surface; continue the poultices.

Sept. 29.—Having seen me remove some of the loosened epidermis, the patient afterward removed a still greater part of it; urinates freely, but with some burning; continue the strip of linen within the urethra, and the poultices.

Sept. 30.—No pain in urinating. Found about one-fourth of the circumference of the base of the glans rather firmly adhering to the prepuce, (which had resumed nearly its normal size), so that on pulling the prepuce downward the glans was drawn to one side; broke up the adhesion by gently pulling and pressing the adhering surfaces apart, and dressed with lint and sweet oil, to prevent further adhesion. Discontinue poultices, and apply, two or three times a day, a mixture of olive oil five parts, simple cerate one part.

Oct. 1.—Parts much better, but still a slight swelling of prepuce. Ordered the organ to be held in cold water, two or three times a day, about half an hour each time; applying, after each drying, the above softened simple cerate. In two days more, the same course being pursued, the patient was well.

During the whole course of treatment, no change of diet was observed; the glans and prepuce, especially, were exceedingly sensitive to the touch, and had to be operated upon with great gentleness. The patient had three loose, dark, and very offensive stools, daily, which continued until the inflammation had subsided.

I present this case both on account of its oddity, if I may so term it, as well as the absence of anything like strangury from such severe cantharidal vesication of a portion of the urinary apparatus itself.

Art. IV.—*A Case of Malformation.* By S. S. Cook, M. D., Richland, Ind.

Mrs. Jones, aged 38. Sanguine billious temperament.—Eighth child.

Nothing of particular interest occurred during utero-gestation. At or near full term, I was called to attend her. She had been in labor twelve hours, but pains were not severe until two hours before my arrival. Labor proceeded naturally. Upon examination, I detected a large sac of waters, which were soon ruptured. Extending my examination further, at the first touch the idea of a shoulder presentation occurred to my mind, but I soon discovered that no part of a natural fœtus could present a figure like the one now observed. At each effort to extend the finger beyond the presenting part, she complained bitterly, and begged me to desist. At the third pain following the rupture of the membranes, the fœtus was expelled, together with the largest quantity of amniotic waters I ever witnessed. The lady was much alarmed, but by assuring her that it was nothing but water, she at length became quiet. I kept the knowledge of the deformity from her for some hours, until her strength was regained. I failed to obtain a sketch of the head, which was the part deformed, but secured the following notes:—

Extremities and body well developed; face, except eyes and ears, also perfect; external ear compacted, presenting a knob-like appearance—with folds, which, being drawn aside, discovered openings that led to the temporal bones; no auditory canals; eyes protruded a full half inch beyond the bridge of the nose, no superciliary ridges, and balls came out even with *os frontis;* the parietal bones were absent, the upper and posterior portion of the head looked as if it had been shaved off with a cleaver, being perfectly flat, except a tumor seated between the temporal bones, one and three-fourths of an inch in length, and about an inch wide, filled with congested nervous matter; from the fifth cervical vertebra to the mastoid process, the integument was absent; from the same point, no trace of vertebræ could be discovered by pressure, but compression over this region produced movements of the extremities; little of the cerebral and cerebellar spaces was left—a firm tissue was spread over all the parts.

Being permitted to make a superficial examination only, I could determine nothing relative to the brain, or what represented it. I made no effort to establish respiration, though for a few moments after delivery, motion could be induced in the lower extremities. This was certainly a strange freak of nature.

PART SECOND.

SELECTIONS.

Quinia in Peritonitis.

The experiments made of late years by Legrouz, Monneret, Andral, Trousseau, and other celebrities connected with the

French school, have proved, beyond a doubt, the beneficial influence of quinine in large doses in the treatment of acute rheumatism, and other diseases of a similar type. Recently this same medicine has been vaunted in combatting certain forms of peritoneal inflammation occurring in connection with the puerperal state, and more especially by M. Beau, who, during his official connection with the Cochin Hospital, employed it in an immense number of cases where that formidable disease prevailed in an epidemic form. So marked was the success which attended his experiments, that he ultimately arrived at the conclusion, that quinine in large and continued doses, if not a specific in that disease, is at least the most valuable, and at the same time the most powerful curative agent we possess in its management and treatment. Entertaining such views in reference to the value of quinine in puerperal peritonitis, it was exceedingly natural that he should try the same remedy in a similar affection occuring apart from the puerperal state; and hence we find, that in the idiopathic form of peritonitis he has recourse to the same mode of treatment, and urges on his pupils its decided superiority over every other with which he is acquainted. In a disease of this kind, which, in spite of the most active and energetic measures we may adopt, most generally pursues its fatal course with amazing rapidity, we are always disposed to accord a favorable reception to any theory, however novel and unsupported by facts it may be, provided only we be told that its practical application has been followed by merely partial success; and we are always most agreeably surprised when, with preconceived notions unfavorable to the theory, we find ourselves confronted with a single fact which, though it may not completely establish the new doctrine, at least enlists our sympathies in its favor. Such was the surprise which we experienced in reference to the quinine treatment recommended by M. Beau, when we witnessed, for the first time a fortnight ago, a genuine case of idiopathic peritonitis treated and cured by this medicine, to the entire exclusion of every other therapeutical measure. To those who have been taught in early life that inflammation of the peritoneal membrane demands, in the majority of instances, the abstraction of blood—if not generally, at least locally—until a powerful impression be made on the system, and that this heroic plan of treatment must be followed by the assiduous exhibition of calomel until the patient be brought under the influence of this powerful and dangerous mineral, the solemn declaration of a man of high authority and great experience, to the effect that such treatment is not only useless but positively pernicious, can not be viewed with any other feeling than that of amazement; and yet, reluctant though they be to abandon a system which has been inculcated in their youth, and which they have been accustomed to regard as strictly orthodox, they must resign themselves to seeing it demolished by another diametrically its opposite.

As a sequel to the foregoing remarks, we can not do better than place before your readers the following case, the details of which we extract from our Medical notes taken at the bedside of the patient. A girl, 24 years of age, was admitted into the service of M. Beau, at the Hopital la Charité, and on examination the following symptoms were recognized: Over the lower part of the abdomen there were great pain and tenderness, which were increased on the slightest pressure; the pulse was small, hard and quick, averaging about 120 beats in the minute; the skin was hot, dry, and harsh; tongue furred; constant nausea, with occasional vomiting; constipation; the features were pinched, and the countenance indicated much anxiety; respiration hurried; complexion muddy, and the conjunctiva slightly yellow. The patient lay on her back, with her legs flexed on the thighs. Her previous history showed that for some weeks prior to the invasion of the disease she had been in an indifferent state of health, which she attributed to an unusual amount of bodily fatigue to which she had been subjected. In the presence of these symptoms, M. Beau at once pronounced the case to be one of acute peritonitis. Treatment: an emetic, composed of ipecac. and tart. antimon. was ordered, to be followed up by a purgative enema. The feeling of nausea having thus been removed, and the stomach prepared for the administration of the sulphate of quinine, this medicine was prescribed as follows: two grammes (equal to thirty grains) were ordered to be divided into three doses, one of which was to be given every eighth hour, and a blister was applied to the lower part of the abdomen, over the spot where the pain and tenderness were greatest. After four or five doses of the quinine, its physiological effects, such as deafness, ringing in the ears, etc., began to manifest themselves, and consentaneous with these there was a manifest diminution of the original symptoms. The pulse from 120 was reduced to 110; the pain and tenderness of the abdomen were considerably subdued; the febrile symptoms, generally, were greatly modified, and the countenance became more placid. The quinine was ordered to be continued, together with the use of refreshing drinks, and on the fourth day of the treatment the pulse fell to 100, accompanied by corresponding improvement in all other respects.

In a week or ten days from the commencement of the treatment, the full effects of the quinine having been produced, that is to say, the original disease having been, as it were, overcome, the medicine was gradually diminished, and ultimately discontinued. The pulse has fallen regularly, and the patient is now convalescent. Now, in a case like the above, implying the undoubted existence of inflammatory action of a most important membrane, the indication, according to the notions generally entertained, would be abstraction of blood, if not from the arm, at least by the application of leeches over the seat of the disease; and we venture to say, that in a similar case such would be the practice adopted by a large proportion of medical men. But according to the theory of M. Beau, instead of curing the disease, the abstraction of a single drop of blood would only increase the evil, and ultimately lead to a fatal result. In peritonitis, and in the phlegmasiæ generally, the blood, according to Beau, is poor in red globules, and consequently rich in fibrin; in other words, the increase of the latter is in a direct ratio in the diminution of the former. It is not difficult, therefore, to understand the determined opposition to depletion, and other measures calculated to lower the vitality of the blood. He regards the excess of fibrin as the real pathological condition on which this disease depends; that is to say, he regards the fibrin as the phlogistic principle, and whatever tends to augment the fibrinous portion of the blood must of necessity increase the fever and feed the disease. Consonant with these views he considers anemia, which is always characterized by diminution of the red globules of the blood, as one of the principal predisposing causes of the phlegmasiæ; and when this condition of body exists, exposure to cold and wet, to sudden change of temperature, or to any of the other exciting causes of inflammation, may be followed by an attack of acute peritonitis. Quinine being the sheet anchor of M. Beau, as we have shown, in the treatment of this disease, it will not be out of place here to indicate some of the leading rules which he lays down in reference to the manner in which it should be employed, and on the rigid observance of which the success will depend. It is necessary that a decided effect be produced on the system at once, and hence the earlier the quinine is exhibited after the malady has declared itself, the better. But in every case he deems it advisable to premise the first dose of quinine with an emetic; to be followed up by a purgative enema. As soon as the stomach is prepared to retain the quinine, he gives the latter to the extent of eight grains every eighth hour, and this quantity of the salt must be continued for several days in succession. It is right, however, to observe that the dose must be proportioned to the sensibility of the patient; that is to say, it must be increased should the intoxication produced by it prove too feeble, and diminished in the event of its being too strong. M. Beau has never, in the course of his experience, had occasion to prescribe a larger dose than four grammes (60 grains) of the salt in the twenty-four hours. Even when the inflammation of the peritoneum is limited to one spot, and when the malady has been to a certain extent overcome, it becomes imperative towards the second or third day to increase the dose of the salt to a small extent, as the system becoming accustomed to it, the quinine in its original dose would not suffice to maintain the mastery over the disease. For the same reason, the medicine must not be diminished too rapidly, nor discontinued too early. Beau states that he has seen cases in which, up to the eighteenth day of the disease, he could not suspend the medicine without such suspension being followed by a recurrence of the febrile symptoms. Should the stomach, from excessive irritation, reject the quinine (by no means an uncommon occurrence), it should again be administered in some other form, so that if one form does not suit, another may. When, notwithstanding the form in which it is administered, the stomach obstinately refuses it, the quinine may be given in the form of enema, as experience has proved that its absorption readily takes place when given in this manner.—*Correspondent of the Med. Times and Gaz.*, July 2, 1859.

National Peculiarities in Diet.

The health of a people must depend, in no small degree, upon the usual quality of its food, and the habits formed in consuming it. And this must be allowed to be true, even while we acknowledge the almost unlimited capacity of the human stomach to dispose of the most varied, and, too often, the most inappropriate articles. Not to dwell upon the peculiarities in diet which are mainly due to climatic influences—such as the enormous injestion of fatty substances in very cold regions, demanded by the necessities of the human constitution, and the large consumption of fruits and light farinaceous articles in warm latitudes—the every-day usages of the inhabitants of the temperate zones, so familiar to us, are not unworthy of a closer consideration than is commonly accorded them, both in a hygienic and dietetic point of view.

That no standard can be set up as applicable to all, in regard to the *amount* of food to be taken, is undeniable. Countless circumstances combine to render this a variable quantity; but it may be safely asserted that, generally, far too much is taken by those whose means allow them to indulge their palates and overload their stomach. This is true on the sea as well as on the land, as we lately had occasion to remark, when noticing the dietetics of our luxuriously appointed steam-packets. If we were to particularize, we should say the Englishman is more prone to exceed in taking solid food, and the Scotchman in his potations—although we can testify to an improvement in this latter respect, in many parts of the land of "barley-bree." The Irishman, when he is provident enough to get anything like abundance, is very apt to combine the faults of his fellow-islanders; and, when transplanted to the Scottish shores, testifies his decided preference for their whisky over that of his own land. The American has a fault which is fully as destructive to individual and to national health and vigor, as either of the others mentioned—although the results are not so immediate. We refer to the *rapidity* of swallowing, so long and so unfortunately a characteristic of the inhabitants of the States. This is a trite subject, but not the less a most important one, and which it is the duty of the medical profession always to bring prominently before the people. An adjunct evil is the too great variety of supplementary articles consumed among us—an error observable elsewhere, it is true, but, as we think, especially noticeable in our country, and expressed, often, in the providing of sweetmeats and knick-knacks of various sorts, which tickle the palate, but tease the stomach. The astonishing quantity of confectionery consumed amongst us can hardly be estimated, but it is preposterous and enormous. We have heard of young persons at school, who not only lavished all their pocket money in the purchase of candies, cakes, etc., but even run largely in debt for similar destructive edibles. This vicious appetite prevails to a greater extent still, in hot latitudes. We have known young Cubans, and youth from our Southern States, who had nearly destroyed their health by these deplorable habits.

The influence of different climates must essentially affect national dietetics. We have already intimated our intention of not discussing this portion of the subject. It may be said, however, that the climate of Great Britain seems to allow of the freer use of spirits and malt liquors than our own does, with impunity, and often with benefit. In expressing this opinion, we are by no means contradicting ourselves—there may be intemperance in any country. Yet the Briton, be he Englishman, Scot, or Irishman, habitually takes spirits—and it is the exception if he does not—and even freely, not to say very frequently to excess, the constitution of such a man, on the average, endures the habit much better and longer than that of the hard or even the moderate drinker with us. Now, something of this is doubtless owing to the *quality* of the liquors used. There can be no doubt but this is superior in Great Britain. The adulteration of liquors is doubtless great everywhere; but more good wine, whisky, ale and porter, it will be allowed, is obtainable and used in Great Britain than with us. Another thing which has a very strong influence in prolonging the endurance of the spirit-drinker's constitution in the British Isles—and that, even when he does not get the best liquors—is, that, as a rule of almost universal application, nearly all drinking is done at, or after dinner. The stomach, it is easy to see, will far more easily endure this sort of treatment, than it does the *ante-prandial* libations to which it is so constantly subjected, by such crowds, in the fashionable drinking "saloons" and low tippling shops of our large cities. The use of the wines of France and Germany, by the inhabitants of those countries, is rarely if ever injurious; and the abuse of spiritous liquors there, as is well known, is comparatively infrequent. With respect to the general immunity of those who drink no spirits *before* dinner, we have lately observed some noteworthy remarks in the *Dublin Quarterly Journal of Medical Science* for May, 1859, in an article devoted to reviewing Mr. Smee's late work on "Debility and Defective Nutrition." The writer says:—"And here, perhaps, we may be permitted to state a conclusion to which our experience has irresistibly drawn us—it is this, that people who confine their excesses to *after-dinner* potations rarely suffer from delirium tremens. We are acquainted with many members of the old school—a school, happily, passing away from amongst us—who would not consider the business of the day brought to a satisfactory conclusion did they not go to bed drunk, or, at all events, in a state bordering on inebriation, being accustomed for some forty or fifty years of their lives to drink far beyond what is at present tolerated by the usages of society. These parties, to whom we now allude, never suffered from delirium tremens; *but they never drank before dinner;* up to that meal they were constitutionally abstemious." After referring to a remarkable instance of a gentleman (now an octogenarian, and whom his family never remember as having gone to bed sober) who not only was exempt from any ill effects of his long-continued excesses, but recovered well from a fracture of the thigh only a few years since—the reviewer accounts as follows for these remarkable facts:—"The explanation of such an exception from what appears to be the curse attached to excessive indulgence in this vice is, we think—that people of these habits are enabled to enjoy, at all events, one, if not two meals; they make a good dinner, if not a good breakfast, and thus the balance is re-established between the muscular and nervous systems. Be this, however, as it may, the fact stated is the result of no mean experience in such cases—the explanation offered may be taken '*quantum valeat.*'"

If the quality of *bread* may be properly considered as affording an example of national peculiarities in diet—and we certainly think it may—we are sorry to say, that our own country does not herein compare favorably with most others. Bread is generally most excellent in Great Britain—proverbially superior in France—but not, in our experience, so good elsewhere upon the European continent. Good bread in the United States is the exception—whether we regard the admixture, preparation, or baking. In no one article of food, perhaps, should more pains be taken to have it in all respects excellent, and especially when people—as is so widely the practice with us—are constantly *bolting* it, hot and fresh! In the bread line, we may mention with especial commendation, the oaten-cake of Scotland; unrivaled, when well made — no less than the "*parritch*" of the same sweet and fresh oatmeal—as an ingredient of diet—especially where the habit is costive. So that the intended severity of Dr. Johnson, when defining the word Oats, is ineffectual to influence those who have had personal experience of their excellence as food for men no less than horses.

The subject of national peculiarities in diet, while it is a most interesting and important one, is rivaled by those individual characteristics which render every man a study to himself, if he would preserve, in the best condition possible, the marvelous structure vouchsafed to him as the tenement of his immortal spirit. It surely behooves mankind—of whatever nation—to eschew all those influences, whether from within or without, which tend to impair the wondrous union of soul and body. Care, anxiety, and turbulent passion of every sort, set at defiance the best rules of hygiene, and render null the greatest triumphs of healthful cookery. We were lately much struck with the following simple but truthful words, which we observed in a Scotch paper. The advice is not new, but it is as good as if it were—and with it we will conclude this already lengthy article. "HEAR THE OLD MAN. The venerable and Rev. Daniel Waldo says:—'I am now an old man. I have seen nearly a century. Do you want to know how to grow old slowly and happily? Let me tell you. Always eat slowly — masticate well. Go to your food, to your rest, to your occupations, smiling. Keep a good nature and a soft temper everywhere. Never give way to anger—a violent tempest of passion tears down the constitution more than a typhus fever.'" — *Boston Med. and Surg. Jour., from the Nashville Jour. of Med. and Surg.*

On Combination of Small-Pox and Syphilis. Communicated by Prof. H. BAMBERGER, of Wurzburg. Translated from the Zeitschrift fur practische Heilkunde, by T. L. A. GREVE, M. D.

In No. 10 of this journal, I reported several cases of a combination of small-pox with other diseases, and specially with syphilis, which seemed to me of some importance with regard to the theory of both forms of disease.

Relative to this article, the following case was recently communicated to me by one of my former students, who is at present assistant physician in a city hospital, with the wish to publish it without giving the author's name and place of residence; a desire, the reason of which is, that it treats of experiments on syphilization, which, in certain States, might lead to disagreeable conflicts with the civil authorities. While I give the facts of the case in the observer's own language, I shall take the liberty to add a few remarks at the end of his report.

"Since about one and a half years, I have had opportunity, in several cases, to make experiments on the value of the so-much-extolled syphilization; the result of which, however unfavorable it was, I would have published long ago, if the regard which I owe to my position at this place, would allow me to do so. While engaged at these experiments, then, the following case came under my observation:—

A strongly built coachman, 27 years of age, was received into the division for syphilitics in the hospital of this place, on April 27, 1857. According to his statement, he had never before suffered from syphilis; indeed, he never had any important disease. He had been inoculated when a child, the scars from which were yet visible on both arms. On examination, a tolerably deep ulcer, of about the size of a small pea, surrounded by a raised margin, was found on the right side of the glans penis, and a more shallow one on the corresponding place of contact on the inner side of the prepuce. Both ulcers, which had, according to the patient's statement, existed for about three weeks, were covered with a purulent secretion, after the removal of which by washing, a fatty-looking bottom made its appearance. The raised borders of the ulcers felt somewhat hard. Affections of the throat, swelling of the cervical and cubital glands, and such like, were not present. Altogether, the general health of the patient was perfectly good.

I inoculated with pus from a primary chancre of another individual, making 10 punctures at one time. After 12 hours, reddened areolæ began to form around all the punctures; which afterward showed in the center a small elevation, soon developing itself into an elastic pustule filled with pus. The same was observed on 30 inoculations, made subsequently; so that there were altogether 40 punctures, 20 on the arms, 10 on the thighs, 10 on the breast. The pustules spread on the third or fourth day of their existence, became somewhat flatter, and the parts surrounding them began to assume a livid color. About this time they burst or dried up, so that crusts were formed, after the falling off of which small purulent ulcers remained, which often increased visibly in size until many of the ulcers occu pied a space nearly twice as large as the pustule from which they originated.

The ulcer on the prepuce was closed on the sixth day after the inoculation, and the corresponding one on the glans was cicatrizing. The latter ulcer was healed after the 40th inoculation, (May 15th.) The last made pustules also developed themselves into ulcers in the manner stated, and all of them remained now obstinately, without change, for some time.

In the hospital of the place exists the inconvenience, that the division for small-pox, though separated as much as possible, is in the same corridor with the division for syphilis. There have been constantly, for several months past, some patients in the small-pox division, and it happened tolerably often that nurses and patients of other divisions were attacked with variola. Among syphilitics alone, no case had hitherto occurred, although they were in the closest proximity, and besides, in indirect communication with the small-pox patients by the visits of the same physician. I nearly believed already in a certain immunity of syphilitic patients from variola, when, on May 31st, the above mentioned coachman, whose 40 inoculation ulcers had not changed in the meantime, complained of weakness, pain in the head, difficulty of swallowing, pain in the loins, and inclination to vomit, with a high fever. On the 2nd day of June, the variola eruption made its appearance. The exanthem covered the whole body, including the palms of the hands and the soles of the feet, but the pustules were mostly distinct; in the face only they were in a few places confluent; the course of the eruption was as usual. On the 11th day of June, the exsiccation was completed. During the development and the presence of the exanthem, the inoculation ulcers took no part in the process, except that the parts surrounding them, participated in the turgescence of the rest of the skin, and the hitherto livid areolæ assumed a redder color. As soon, however, as the variola declined, there was also a visible improvement in the ulcers, healthy granulations appeared, and the cicatrization progressed equally in all the ulcers with such rapidity, that it was complete on June 19th. The patient was dismissed a few days afterward.

I have often seen and examined the man since; the last time two weeks ago, (April, 1858.) He has so far remained perfectly well, and I was unable to detect any swelling whatever of the cubital and cervical glands, to which I directed particular attention. The places where the inoculation ulcers had been, could be distinguished yet as brownish-colored spots; the variola scars were visible in a moderate degree.

The foregoing case seems to me of interest in several respects. I reasoned upon it as follows: At the time of the variola eruption, the syphilitic dyscrasia was doubtless still remaining, which is proved by the inoculation ulcers, yet entirely retaining the specific character. The course of the variola, however, was not only unmodified, but the surprising circumstance appeared, that at its termination the development of the syphilitic virus was also checked. Unfortunately, it was not practicable to make inoculation experiments on other individuals with pus from the variola pustules, which might have given definite results. It appears, however, from the independent development of the variola, from its undisturbed course; and, lastly, from the rapid and simultaneous healing of the inoculation ulcers, that the small-pox contagium in this case was intensive enough to change the syphilitic contagium so as to make it innoxious.

I believe this hypothesis to be of some value, inasmuch as the above mentioned man has remained well, while I unfortunately did not experience the same favorable result in the other individuals on which syphilization was tried. This latter fact, it seems to me, also invalidates the possible objection, that in this case the syphilis became extinct, perhaps, in consequence of the syphilization independently of the course of the variola."

So far, the observer. Considering the small number of observations, that have been made on the relation of small-pox to syphilis, the above case is certainly worthy of consideration. Especially remarkable is the evidently favorable influence of the small-pox on the healing of the syphilitic inoculation ulcers, which had so long remained stationary. As regards, however, the explanation of the writer, I must acknowledge that I do not fully coincide with it. It might, indeed, be asked, if, at the time of the small-pox inoculation, the inoculation ulcers possessed yet the specific syphilitic character, or if they had already lost it; and in case the first be true, if the access of small-pox destroyed this character, and so caused them to heal, or, if merely a local effect was produced, so that by the great hyperæmia and turgescence of the skin, the hitherto torpid character of the ulcers experienced a favorable change. The first part of the question, however, can not be decided, as no further inoculation experiments were made. Equally difficult is it to express an opinion on the second part. Does the syphilitic ulcer heal because the specific character is lost, or, does the specific character lose itself because the ulcer heals, or, are the healing and the syphilitic character, to a certain extent, independent of each other? Without going into further discussions on this subject, we may, at all events, say, that the loss of the specific character of an ulcer is by no means always the momentum which induces a rapid healing; for daily observation shows ulcers, which long since ceased to furnish inoculable pus, often obstinately remain for a long time. For this reason, I do not think it probable that, in the reported case, the rapid healing of the inoculation ulcers occurred in consequence of the destruction of their syphilitic character by the variola; but believe, that the purely local influence was of greater importance. It would be interesting to learn if small-pox exerted a similar favorable influence on other than local skin diseases; for instance, on favus, chronic coxema, chronic ulcerations of the skin, etc. I do not remember to have made such an observation, but have no doubt that an opportunity for it would sometimes offer itself in the small-pox division of the hospital at Vienna, which furnishes such an ample field for investigation.

The essential difference between the case under consideration and those described by me in No. 10 of this journal, seems to be, that, in the latter, an indubitable constitutional syphilitic disease was complicated with small-pox, a mixed character of their morbid products being apparent, as the variola pustule gradually changed into a moist, broad condyloma; while, in the former, according to my view, no constitutional affection existed, although the observer is inclined to assume this, as he speaks of a syphilitic dyscrasia, and, also, on my further inquiry, contended for the presence of constitutional disease. It must be admitted, that so numerous inoculations make this very probable; but they involve, by no means, the necessity of general infection, and the results of the observations themselves do not seem to warrant such an assumption. The character of the original ulcers seems to have been a simple one, as nothing is said of an indurated, but merely of a hardened margin, which, as is well known, occurs in many simple ulcers; the rapid cicatrization without remaining induration, the natural condition of the glands during the whole course of the affection, the indisturbed health at the expiration of nearly a year, also indicate the absence of general disease. It is undecided yet if syphilization really produces often so general effects as is believed; and this certainly furnishes a well-founded objection to the whole syphilization theory, in its prophylactic application. If we consider that comparatively few primary ulcers are followed by constitutional symptoms, it is not improbable that forty and even more inoculations might be made without this result.

Supposing this view to be correct, the above case proves that primary syphilis and small-pox do not enter into intimate union, but that they merely exist together, which is not surprising, as the former is a purely local, the latter a constitutional disease. The favorable influence on the syphilitic ulcers which was observed, is, however, interesting. The observations which I have heretofore published, fully convince me, that on the other hand, small-pox and constitutional syphilis materially influence each other, and that they may combine in such a manner, that their local products participate of the character of both affections.

CINCINNATI, Jan. 10, 1860.

Intestinal Infusoria in Man. By Professor MALMSTEN, of Stockholm. Published originally in the *Archiv fur Pathologische Anatomie*, and translated from the *Gazette Hebdomadaire*, by GEORGE S. BLACKIE, M. D.

CASE I.—A sailor, about thirty years old, entered the hospital of Seraphim on the 22nd of March, 1856, suffering from a lienteric affection. He had had two years before cholera, which had been followed by various disorders of the digestive system, by constipation alternating with diarrhea, etc. Frequently his meals were followed immediately by copious diarrhea-like discharges, slightly colored, and containing a large amount of undigested food. A painful tenesmus, accompanied by an expulsion of small quantities of bloody fluid, supervened, when all the contents of the intestines had been passed by the stools. Then, to allay this, the patient was compelled to refill his stomach, which produced the same series of accidents. Enfeebled by the frequent exacerbations of the affection, he was finally obliged to confine himself to bed. He preserved always a remarkable appetite. The same symptoms continued to the 5th of April, in spite of the employment of numerous remedies. The skin was dry, but he had no fever, and the abdomen was not sensitive on being pressed. On examining the rectum, there was found near the anus an ulcer, with a hard base and swollen edges, covered with a purulent discharge. The microscopic examination of this liquid detected a large number of animalcules of the peculiar description given below. Cauterization with potassa fusa, and the injection of cod-liver oil, caused, by the end of a few weeks, the cicatrization of the ulcer.

The patient meanwhile took sulphate of quinine internally. He recruited his strength, but the state of his digestive functions remained unchanged. At last, on examining the stools, immediately after their passage, with the microscope, the presence of an incredible number of infusoria was recognized,—infusuria similar to those which had been previously found in the pus which covered the ulceration of the rectum. These were found likewise in the mucus taken from the intestine by an instrument, and a great number of explorations and varied methods of examination produced but the same result.

M. Malmsten prescribed injections of chloro-hydric acid, which produced marked improvement. The number of stools was reduced to two a day, and when on the 28th of August, the patient left the hospital, there was but a very small number of the animalcules in the evacuations. They were still more reduced in number when M. Malmsten saw his patient again in March, 1857.

The animalcules, very carefully examined by Professor Lowen, measured about a millemetre* in length, and had an oval form, which was considerably enlarged when they were full of food. They were well supplied with ciliæ around the buccal orifice, with which was continuous an œsophagus, prolonged in some instances by a dark line, indicating the presence of alimentary matters. The anus, situated in the posterior extremity of the belly, was sometimes retracted, sometimes protruding. In the interior of the body one could see the contractile vesicles, an oval nucleus, and the food, such as grains of starch and the particles of oil. These animalcules were very active in their movements; they died, moreover, some hours after quitting the intestine. On looking at these characters we find that they approach the parmœcia, hence M. Malmsten proposes for them the name, *Paramœcium coli.*

Case II.—A woman, about thirty-five years old, presented herself, having the same symptoms as the subject of Case I.; the stools were generally darkened by the presence of blood, and the abdomen was very sensitive on pressure along the track of the colon. The infusoria were very abundant in the stools. The patient died of marasmus.

On a post-mortem examination gangrenous ulcerations were found in the large intestines. The sanious pus which covered them contained the infusoria, but they were much more abundant on the mucus which covered the points not affected by disease, and especially the cæcum and vermiform process which were healthy. None were found beyond the ileocœcal valve.

M. Malmsten supposes that the lienteric symptoms observed in these patients were due to an exaggeration of the peristaltic movements of the intestine and its secretions, a natural result of the irritation produced by the innumerable little parasites distributed over the mucous membrane of the colon. The two cases agree also in showing that the presence of these little beings is not necessarily owing to a diseased state of the intestine.

Is this a very rare disease, or entirely exceptional? M. Malmsten thinks it is neither. If it has not been seen up to this time by observers, it is undoubtedly because the infusoria die and disappear so very rapidly after their expulsion. It is necessary, then, in order to detect them, to examine the discharges as soon as possible.

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* Equal to 0,03937 of an English inch, or about two-fifths of a line.

M. Malmsten makes further the remark, that these parasites being exclusively found in the large intestines, permit of direct action on them by the use of injections; and he calls special attention to the advantageous effects obtained in the first case by the use of injections of chloro-hydric acid.—*Nashville Jour. of Med. and Surg.*

On the Artificial Formation of Tartaric Acid. By Professor Liebig.

Professor Liebig has lately made the very interesting observation that tartaric acid is among the products of decomposition of sugar of milk by nitric acid. On examining the acid mother liquid, after the separation of mucic acid, he found among other constituents an organic acid, some of the salts of which, when analyzed, yielded results differing materially from the salts of the same bases with mucic acid, but agreed with the composition of the corresponding tartrates. A comparison between the latter and the salts obtained from the mother liquor, and the further examination of the isolated acid, proved the identity of this acid with tartaric acid. But besides the true tartaric acid, the mother liquor appears to contain another acid of the same composition, but somewhat different properties, probably a modification of tartaric acid. Professor Liebig is still occupied with the researches on this subject, and expects to be able soon to report his results.

To this preliminary notice it must be added that Professor Liebig tested the sugar of milk which he used, for tartaric acid, so as to remove all suspicion of the sugar having been accidentally contaminated with the acid.

This discovery of Liebig's is very interesting, as it appears to be the first observation of the artitificial formation of tartaric acid. Professor Erdmann of Leipzig, in 1836, while studying the products of decomposition of sugar by nitric acid, for the purpose of investigating Guerin's hydroxalic acid, obtained an acid which, in accordance with his analyses, he took to be a modification of tartaric (metatartaric) acid, and which, as he observed, was spontaneously converted into tartaric acid. (Annalen d. Pharm. xxxvi. 1.) Subsequently, however, on investigating the same subject, H. Hess, of St. Petersburg, came to a different result, and declared Erdmann's metatartaric acid to be saccharic acid, (Ann. d. Ph. xxxvi. 1.) The artificial formation of tartaric acid has therefore been doubtful until Liebig's latest discovery.—*Buchner's N. Repertorium*, viii. 317, 318, *from Am. Jour. of Pharm.* J. M. M.

Glycerole of Aloes. By A. F. HASELDEN.

This preparation was originally introduced by M. Chausit, and subsequently by the General Apothecaries' Company, to the notice of the profession. Thinking it possible and probable that some of the readers of the *Pharmaceutical Journal* might meet with or be questioned concerning it, without having any certain or definite acquaintance with it, I beg to offer the following brief account. Glycerole of Aloes, according to M. Chausit, is prepared by dissolving an alcoholic extract of aloes in glycerine. Upon this information, I have prepared some according to the following forms; the proportions are my own, not having any given with account of the preparation:—

Take of	Socotrine Aloes, coarsely powd. and free from dirt,	ʒiv.
	Rectified Spirit of Wine, .	ʒiv.

Macerate until the aloes is dissolved, then filter through bibulous paper; distil the spirit as closely as may be, evaporate what remains to the consistence of treacle, and whilst still warm add sufficient pure glycerine to make four fluid ounces. Now, as the whole of the aloes, with the exception of a very small quantity of extraneous matter, was dissolved by the spirit and eventually mixed with the glycerine, reasoning from what I had already experienced with regard to the solvent power of that substance, I thought that it would possibly *alone* accomplish all that had already been done—that is, the solution of the aloes—but without the assistance of the spirit, and thus avoid a certain waste of material, loss of time, and needless labor. I therefore tried the following experiment:—

Take of	Socotrine Aloes, in fine powder,	ʒ iv.
	Pure Glycerine,	℥ iv.

Mix them well in a mortar, then transfer to a bottle; agitate occasionally during several days, when, should the whole of the aloes not be dissolved, digest for fifteen minutes with gentle heat by means of a water-bath, when it will become dissolved, and may now be strained through linen to separate any small portions of dirt which may by any possibility be present. The result will be a preparation exactly similar to the preceding one, minus a very small quantity of spirit. Following either of these forms, only employing a larger proportion of aloes, a very similar article may be produced from the resin of aloes, which is obtained as a useless residue in preparing the aqueous extract of aloes. The glycerole of aloes is a bright mahogany-colored liquid, of the consistence of Price's best and pure glycerine, and has been recommended by M. Chausit in the treatment of *lichen agrius* as an external application, also to the excoriations from *eczema*. It should be applied with a camel's hair brush.—*London Pharm. Jour.*, Dec., 1859, *from the American Jour. of Pharmacy.*

PART THIRD.

CLINICAL REPORTS.

Newton's Clinical Institute.—Winter Session of 1858-'9. Services of Profs. NEWTON and FREEMAN.

REPORTED BY JAS. A. HENSHALL.

CASE 597.—Dec. 21. Mr. EVANS, aged 41. *Lead Colic.*—This patient is a painter, and while in the enjoyment of good health and working at his trade, was attacked about two weeks ago, with Painter's or Lead Colic; and his symptoms, at that time, he described as follows: Violent pain in lower part of the abdomen, which was aggravated by pressure; skin dry; great thirst; tenesmus; gums pale, with a taste of lead in the mouth; bowels constipated; loss of appetite; desire to vomit; and general prostration of the nervous system; has been taking cathartic medicine. His tongue has now a leaden hue; has slight pains in chest and back; upon inclining the head backward it occasions a severe pain in the occiput and posterior portion of the neck, which seems to be of a neuralgic character, consequent upon the lead.

Treatment.—℞. Ext. Valerian, grs.xv.
Ext. Belladonna, grs. vij.
Podophyllin, grs. iij.
Macrotin, grs. xv.
Sulph. Morphia, grs. iij. M. ft. pil. No. xv.

Take one pill three times a day.

℞. Tinc. Belladonna,
Ol. Olivae *aa* ℥ ij. M.

Apply with friction to back of neck.

℞. Comp. Podophyllin, pills vj.

Take one every night and morning until they operate.

Dec. 28.—Feels better, and pain in back of neck much relieved. Continue treatment, and apply irritating plaster to posterior part of the neck.

Jan. 11.—Much improved; bowels regular; appetite good;

the pain in back of neck has disappeared, but still remains in region of occiput, though not so severe; tongue healthy.

℞.—Ext. Belladonna, grs. xij.
Al. Ext. Nux Vomica, grs. iij.
Macrotin, Iodine, *aa* grs. xx.
Sulph. Morphia, grs. v. M.

Make pills No. xxiv. Take one morning and evening. Shave the hair from the back of the head and apply.

℞.—Ext. Belladonna, ʒ ij.
Aqua, ℥ vij.

Jan. 18.—Improving rapidly; his head now pains slightly in the morning; otherwise perfectly well.

℞.—Comp. Syr. Stillingia, ℥ iv.
Iod. Potass., ʒ j. M.

Take a teaspoonful four times a day.

℞.—Ext. Belladonna, ℥ ss.
Aqua, ℥ vj. M.

With this wet a bandage, and bind around the head.

Jan. 26.—Head still slightly affected. Shave a spot at back of head, about two inches in diameter, and apply Ol. Tiglii. Discharged.

CASE 598.—Dec. 28. PATRICK FLANNIN, aged 17. *Chronic Irritation of Stomach.* Has been more or less affected for four years, but has been much worse during the last four months; has a constant pain in epigastric region, sometimes so aggravated by walking, as to render this impossible; abdomen tender upon pressure; feels sick at stomach after eating; tongue heavily coated; bad taste in the mouth; bowels constipated; urine high colored and scanty.

Treatment.—℞.—Comp. Podophyllin pills, vj.

Take two night and morning, until they operate freely.

℞.—Pulv. Hydras. Can., ℥ss.

Take a teaspoonful in a glass of water three times a day.

Jan. 4.—Improving; feels much better; pain in stomach much relieved; still has a bad taste in his mouth. Continue Hydrastis Can.

Feb. 12.—Much improved; eating does not occasion any sickness or nausea, as formerly; tongue appears much healthier, being only slightly coated. Continue treatment.

March 1.—Looks much better; bowels regular; pulse, 96 per minute; appetite good, enjoys dinner better than other meals; occasionally feels slight pain in stomach, accompanied by a chilly sensation; sometimes a slight head-ache.

℞.—Pulv. Lobelia, grs. xx.
Conserve of roses, q. s. M.

Make pills, No. xx. Take one three times a day, before meals. Apply irritating plaster over stomach.

March 15.—Discharged cured.

Case 599.—Jan. 11. Mrs. Evans, aged 43. *Dyspepsia.* Has had a bilious habit, and tendency to constipation all her life; has protruding blind pile tumors as large as the ends of the fingers; uses cold water and castile soap to relieve them; appetite poor; light diet agrees with her, meat or coarse food irritates the stomach; pain in the epigastric region, and back; tongue red; breath fetid; upper part of abdomen tender to the touch; skin dry; feels nervous, low-spirited and exhausted; has had no catamenia for seven years; has pain in loins, hips, and forehead, every month about the time when the menses should appear; has prolapsus uteri, leucorrhea, and palpitation of the heart; urine scanty and high colored.

Treatment.—℞. Comp. Podophyllin pills No. x.

Take one night and morning, until they operate briskly.

℞.—Tris-nitrate of Bismuth, ʒ j.
Syr. Helianthus Comp., ℥ vj. M.

Take a teaspoonful three times a day.

Apply the irritating plaster over the stomach; rub the spine with whisky at night, and use the alkaline sponge-bath twice a week.

Jan. 18.—Feels much better; appetite improved; tongue not so red, and slightly coated in the morning; pulse normal in beats, but rather weak; stomach still somewhat irritable; patient in better spirits. Continue treatment. After she has borne the irritating plaster as long as possible over the stomach, apply it to the lumber region of the spine.

Jan. 26.—Marked improvement; rests well at night; pulse natural; some pain in back and shoulders.

℞.—Chloroform, ℥ j.
Tinc. Aconite, Pulv. Camphor,
Tinc. Capsicum, Spts. Turpentine,
Ess. Peppermint, *aa* ℥ ss. M.

Apply to spinal column at night. Apply the irritating plaster to lumbar region, and continue internal treatment. Last appearance,

CASE 600.—JOHN BUTLER, aged 26. *Hemiphlegia.* About two months ago, while in robust health, this patient partook of a hearty supper about midnight, and immediately afterward retired to bed; upon awaking the following morning, he discovered that his left side was completely paralyzed; he also vomited a great deal, at the time. He is now in the same condition as when first affected, being unable to move either extremity upon the side implicated; he has, however, a very slight control of the gluteal muscles, capable of producing a very limited motion of the thigh; the affected side feels cold and insensible; pulse more feeble in that side, the blood vessels seem to have lost their contractile power; he can walk only with the aid of crutches. The cause of the patient's condition was, no doubt, an apoplectic fit, produced by the late supper, on the occasion referred to.

Treatment.—℞. Al. Ext. Nux. Vomica, grs. ij.
Macrotin, grs. xxiv.
Iodine, grs. viij. M.

Make pills, No. xxiv. Take one pill twice a day.

℞. Tinc. Capsicum, ℥ ij.
Chloroform, Spts. Ammonia,
Ol. Terebinth, *aa* ℥ j.
Ol. Tiglii, ℨ ss. M.

Apply along the spine night and morning. Use alkaline bath twice a week.

Jan. 26.—Says he feels much better; bowels constipated; evidently not much improvement.

℞. Com. Podophyllin pills, No. x.

Take one every three hours, until they operate freely. Continue former treatment, and apply the galvanic battery.

Feb. 15.—Improving; affected side not so numb; walks better; tongue slightly coated; the galvanic battery has a good effect. Continue treatment.

March 1.—Rapidly improving; can walk very well, with the aid of a cane; general health never was better. Continue treatment.

March 22.—Nearly cured; feels strong and hearty; has almost entire use of arm and leg.

℞. Alc. Ex. Nux Vomica, grs. ij.
Ext. Belladonna, grs. iij.
Macrotin, ʒ ss.
Iodine, grs. x. M.

Make pills, No. xxx. Take one pill night and morning. Continue the galvanic battery.

April 1.—Walks without any aid and trouble; rests well at night; has no pain; affected side feels as well as the other; arm well, but still rather weak. Discharged cured.

Case 601.—John Higgins, aged 35. *Ulcer of Leg.* This patient is afflicted with what is generally known as "old sore leg," the most distinguishing characteristic of which is its obstinacy to heal. About three years ago, he was the subject of paralysis, but gradually recovered; about a year ago, the left leg commenced swelling about the region of the ancle; and, four months since, an ulcer was developed upon the anterior part of the lower third of the tibia, which was treated by the application of liniments, emollients, etc., but with no benefit. The leg is now much swollen from the ancle to the knee, and pits upon pressure; the ulcer is angry and irritable, and discharges a copious watery secretion; the parts surrounding the ulcer are of a red or purplish hue.

Treatment.—Apply strips of adhesive plaster over the region of the ulcer, and bandage from the foot to the knee.

℞. Comp. Syr. Stillingia, ℥ iv.
Ferri Phosphas, ʒ ij. M.

Take a teaspoonful three times a day.

Feb. 18.—Improving. Ulcer looks healthier; swelling much reduced. Continue treatment.

Feb. 25.—Leg reduced to its normal size; ulcer healing rapidly. Continue treatment.

March 8.—Discharged cured.

Case 602.—Thos. Kennedy, aged 35. *Punctured Wound.* A few days ago, a nail was forced into the palm of his hand, penetrating the palmar fascia; the hand is much swollen, and the patient suffers the most excruciating pain; can not sleep at night; the great danger here to be apprehended, is from Tetanus.

Treatment.—Apply to the wound, Sesqui-Carb. Potassa, followed by a flax-seed poultice, having mixed with it Ext. Belladonna, grs. x.

℞. Comp. Pulv. Ipecac, et Opii, ʒ ss.

Make viij. powders. Take one three times a day.

Mar. 4.—Hand still very painful at night, but pain subsides toward morning; the cuticle is detached from palm of hand; no constitutional symptoms. Continue the poultice; remove the detached cuticle from around the wound, and apply Argent. Nitras.

Mar. 8.—Much improved; feels much better; can sleep well at night; wound suppurating; the only inconvenience which he now experiences is a slight soreness on back of the hand.

No further report.

PART FOURTH.

[The 1st form of this number of our Journal, by mistake, commenced on page 17; it should have been 65. The mistake shall not occur again.]

EDITORIAL.

Extracts from Correspondents.

PROF. NEWTON—Dear Sir: I send you a report of a case which was of great interest to me, and if you deem it worthy, you may insert it in your invaluable journal.

I sent Mr. Henshall $2, a few weeks ago, for the Journal, stating I had not received my last. If it is not out, *all right*. I am anxious to obtain each number, to have them bound—a good practice—*hard times*, etc.

Yours, &c., S. S. COOK.

Such letters we like to receive. They are not only encouraging, but contain material aid, which is absolutely necessary to keep up any journal. We are much obliged to the Dr. for renewing his subscription, notwithstanding the hard times, of which all our country friends complain. We hope all our subscribers will follow his good example, and forward us their subscriptions. Two dollars can be spared by almost any one, and we think a more profitable investment in the medical line can not be made, than by subscribing for our journal. We like his plan, too, of binding each volume, and keeping it for reference. All should do likewise.

We extract the following from a letter from Dr. L. T. Beam, of Pennsylvania. The Dr. inclosed us $4, after noticing which he remarks:—

"In addition to the above *substantial* token of remembrance and commendation, permit the expression, that the union of the Colleges and Journals is the proper move for the advancement of our common cause. Efforts, mighty and vigorous, are requisite to pull down the strongholds that oppose us. A work of this kind should not lag for want of support from those whom it essentially benefits—and I trust it will not, but that every individual will feel the importance of sustaining the organ that advocates their cause."

The Dr. speaks correctly, and is sincere, for he backs his words with a "substantial token of remembrance."

We have already done much, but the work is yet incomplete, and we must have the hearty co-operation of all our friends, not manifested simply in words, but in contributions, reports of cases, and prompt remittances. With these aids, we can and will do much more. We hope all will follow Dr. Beam's good example.

Space will not permit us giving, at this time, any more extracts from the many complimentary letters which are daily coming in. We take this opportunity of thanking our many friends for their approbation and kind wishes, and at a future day may add more extracts.

LIFE INSURANCE.

At first sight, an article upon the subject of "Life Insurance" may seem out of place in a journal devoted to medicine, but we hope to show, before we are done, that the matter is of interest to the public and to physicians; and trust that the following remarks will not be deemed wholly inappropriate.

The sole duty of the medical man does not consist in the mechanical drudgery of making and administering pills: morally, his province is of a higher, more ennobling and useful nature. Besides alleviating pain and distress, he should feel it to be his duty to be an "overseer" of the public health, and to recommend such habits and such hygienic measures as tend to promote the health and happiness of his friends and patrons. The public being generally ignorant of physiological laws, and the consequences of a non-compliance with them, should be instructed upon these points by the family physician, who is admitted, as a counsellor and adviser, to the domestic circle. As an example, few mothers know the influence of mental states upon the process of lactation. They are ignorant that an indulgence of the passions and emotions, grief, fear, anger, etc., will not only change the character of the milk, rendering it unhealthy and irritating to the infant's bowels, but, in certain cases, makes it a deadly poison. Anxiety and apprehension on the part of the mother for the safety of her sick child, will often so alter the milk as to make it an adjuvant in increasing the severity of the disease, and render nugatory all the means resorted to by the physician. Now it is plainly a duty, due both to himself and the mother, under these circumstances, to point out to her the consequences, and to give her such encouragement as will tranquilize her mind. If these fail, he should remove the infant from the breast entirely.

The same principle should be applied in other cases. The influence of mental disturbance, apprehension, fear, etc., upon disease, is well marked in adults, and often leads to fatal results. If a patient loses confidence in his physician, believes he will certainly die, becomes alarmed, or is laboring under apprehension for the future welfare of his family, the experienced medical man sees at once that the case is made much more difficult, and his first care is to stimulate his hope, and procure composure. Many sensitive minds do not fear death *per se* nearly so much as the consequences which would result by their demise, to those bound to them by the strongest ties of consanguinity. There are many worthy men whose wives and children depend upon their individual exertions for maintenance. When such become diseased, it often happens, that the fearful pictures of destitution and want that would befall their families in case of death, so weigh upon their minds, already depressed and weakened by suffering, as to increase the ravages of disease and frustrate all the efforts of the most skillful. Every one should make provision for his family. It gives peace of mind on contemplating the future, and promotes present enjoyment and contentment. Those who have not accumulated a sufficiency, can remedy the difficulty by having their *lives insured.* Physicians and the people should adopt this plan. The living will be benefited, and widows and orphans provided for. Much anxiety, dread, and pecuniary suffering will thus be obviated. Physicians should advise this course, and adopt it themselves.

The foregoing reflections were suggested by looking over the report and claims of the Royal Insurance Company, handed us by their polite and gentlemanly agent in this city, Dr. John S. Law, office *Times* Buildings, Third street. The capital of this Company is two millions sterling, equal to about ten millions of our currency. This is one of the most reliable Companies we know. All information wanted, may be obtained by addressing the agent.

From this report, we extract the following, under the head, "Life Insurance promotes Longevity," and think the remarks pertinent:—

He who thus fulfills the obligations of nature, to make a provision for his family, must be conscious that he is raised to the scale of moral beings above that man who is regardless of the future subsistence of those who especially rest on him for support.

The Assured does not live solely for himself. Indeed, the neglect of the duty, if its performance is by a moderate self-denial at all attainable, can only originate in a love of present personal ease stifling the question which natural affection would suggest, viz:

If my life were prematurely closed, to what extent would my family suffer, either as respects their position or their subsistence? This question is one which, in its aptitude, embraces every grade of society. Whilst its applicability to the man who supports his family from day to day by the craft of his handy-workmanship, or by the efforts of his intellect, is self-evident, its suitability, as offering a subject for serious consideration and forethought in the highest classes of the land, could be shown to be equally undeniable.

Other beneficial influences on the mind of the Assurer might be adduced. The moral energies so necessary to the daily struggler for the means of a comfortable subsistence are, by the mere possession of a Life Policy, frequently unfettered from the dread of that sudden poverty in which his death would involve his family, a dread which, if the history of pauperism could be unfolded, would be found, from its wasting influence on the mind, to ruin the health, if not produce the death, of many a care-worn parent.

LIFE ASSURANCE PROLONGS LIFE.—There are many cases on record where the policy of insurance has saved the very life on which it was payable; and, on the contrary, many deaths have been accelerated by the recollection, on a bed of sickness, that the duty of insurance has been neglected. The poet Burns, in writing to Mr. Dunlap, December 15, 1795, when reflecting on the situation of his family in the event of his death, remarks:—"There had much need be many pleasures annexed to the states of husband and father, for, God knows, they have many peculiar cares. I can not describe to you the anxious, sleepless hours these ties frequently give me. I see a train of helpless little folks here, and my exertions all their stay; and on what a little thread does the life of a man hang! If I am nipped off at the command of fate, even in all the vigor of manhood as I am—such things happen every day—gracious God! what would become of my little flock? 'Tis here that I envy your people of fortune! A father on his death-bed, taking an everlasting leave of his children, has woe enough; but the man of competent fortune leaves his sons and daughters independency and friends; while I——but I shall run distracted if I think any longer on the subject."

Such were the utterances of Burns' agonized heart when contemplating the situation of his family in the event of his death. In contrast, we record the following case recently reported by a medical gentleman:—"An invalid friend," he says, "was suddenly struck down by illness in the midst of active and philanthropic labors; his medical attendant considered that it was his duty to inform the patient that his recovery was doubtful, if not impossible. The sick man seemed shocked at the intelligence, but requested that he might settle the whole of his furniture and stock-in-trade upon his wife. Suddenly the recollection of his having effected an insurance about a year before came into his mind, and a serene smile broke over the face that a few moments before was wrinkled with haggard anxiety. 'Thank God!' said he to the agent, as he signed his name with a trembling hand, 'you *made* me do my duty, and I am so cheered by the thought, that I shall live and bless you for it. The fear that was carrying me to the grave has fled.' Recovery followed, and the individual lives to testify to the truth of this narrative."—*Brokenshir.*

TO OUR READERS.

It is our intention each month to select some subject, either a special disease, or particular remedy, and to ask a few leading questions pertaining thereto, which we desire answered plainly and concisely by each and every reader of the Journal Our object is to collect and present in a condensed form, a large mass of practical information upon various diseases, and articles of the Materia Medica. The benefit to be derived from this plan, if properly carried out, is apparent to all. The experience of many practitioners, and their special treatment, will be collected and presented in a body, and the effect will be the same as a consultation with physicians from all sections of the country. We hope our patrons will sustain us promptly in this effort to do good. We wish short pertinent articles, and the remedies used specified—if alone, the dose, and if combined with others, the formula, etc.

The subject which we select at this time, is *metrorrhagia*, or hemorrhage from the womb, and desire answers to the following questions:

1. In your experience, has metrorrhagia, during pregnancy, always produced abortion?

2. What is your treatment when it occurs during utero-gestation?

3. Have you ever employed the Oil of Erigeron? If you have, explain its *modus operandi.*

SPIRITUAL DOCTORS.

Superstition still stalks through the land. There is a propensity in the human mind to ascribe unnatural phenomena, and everything not clearly or immediately comprehended, to some supernatural agency, to some mysterious influence beyond and above the control of man. Credulity and superstition are twin sisters, and exist in direct ratio to the amount of ignorance. The less familiar one is with any subject or science, the more easily is he imposed upon, and made to believe in supernatural influences connected therewith. The history of medicine shows that upon no subject has there been practiced more knavery and imposition than in this, and in this day men in abundance are found who play upon the string of public credulity, and strike notes whose echoes are the sweet sounding tones of the dollar jingling in their own pockets. The public are the dupes, and justly suffer. Medicines act in a certain manner to cure disease, but because common people can not comprehend precisely the *modus operandi*, they imagine that the doctor somehow imparts to the drugs he administers a peculiar something which renders them curative, and the greater mystery the physician envelopes the subject in, and especially if he obtains a patent for a mixture and advertises extensively, the poor deluded people think that such a process renders a medicine much more valuable, and swallow down these *nostrums* with the greatest avidity and faith. The impression that certain circumstances and men bestow curative properties upon medicines, has existed in all ages. It is well known that honey is beneficial to apthæ, or sore mouth of children; but Soranius, the author of the life of Hippocrates, said that honey was curative because taken from bees hived near the tomb of the great father of medicine. Nauseating, filthy and disgusting draughts have been given under the conviction that peculiar circumstances rendered them valuable. Celsus indorsed a prescription of human flesh and the blood of a gladiator, for the cure of epilepsy. Horse dung mixed in wine, stewed toads, etc., have, from time to time, been recommended for the cure of certain complaints. In all these cases, the faith of the individual had to be enlisted. The present enlightened day, and the advance of medicine, have not done away with these absurdities. People are as easily imposed upon now as they were a half century ago, and as greedily gulp down the extraordinary stories of the miraculous cures performed by certain patent medicines, and by those who profess to have direct communication with the *spirit land*. These spiritual impostors are becoming very numerous, and we have in our Eastern cities "asylums for the afflicted," who are cured by simply "laying on of hands," and apothecaries who prepare "clairvoyant, mesmerical and spiritual prescriptions." These establishments, we understand, are doing a good business, and draining the pockets of the poor, credulous, superstitious public. In our own city, we have some of the same stripe, who are working miraculous cures by laying on of hands, and various monkey motions and manipulations, simulating the barbarian sorcerers, and ascribe all the glory and power to some invisible spirit of the other world, who, by a magical influence, had opened their eyes to see the precise locality of the disease, and given them power to cure it immediately.

A short time ago we were amused to hear the account given by one of these spiritual doctors, of a case to which he had been called. The lady was in the last stage of disease when he saw her, and beyond the reach of even spiritual influence. She had been attended by a Dr. F., who, according to his account, knew nothing about the difficulty; but the good spirits of heaven (or hell?) enabled him, to use his own language, to see that her "ovaria was diseased, which came from the womb. The womb was prolapsed and laid upon the ovaria, and the ovaria laid up upon the hip, and the hip was dislocated about an inch. Dr. F. had examined the case with a *spectum*, but could not tell what was the matter."

This language itself is enough to show up the miserable quackery of this spiritual pretender, and enough to disgust any sensible individual who understands the phraseology which he attempted to use.

People are coming from all quarters to be humbugged, and their money taken from them by these men, and they should be warned of the folly of such procedure, and should feel ashamed that they should be thought credulous enough to be imposed upon by such superstitious tomfoolery. If they do not believe us, let them try these upstarts, and when they have paid one or two hundred dollars, they will be satisfied that we are right in denouncing them as impostors.

EDITORIAL ABSTRACTS AND CLIPPINGS.

Threatened Abortion apparently caused by Malaria.—Dr. M. O. Davidson, of Arkansas, speaks of a case of threatened abortion, which seemed to depend on malarial influence, and was cured by quinine. When he first saw the woman, she was laboring under severe uternic contractions, and being satisfied that she had not arrived at full time, quieted the pains with laudanum. But they recurred regularly every evening, until he administered quinine, which checked them. About every three weeks they would return, and were removed by the same means, until the full time of utero-gestation, when she was delivered of a healthy child.

A French Specific for Asthma.—Dr. Courty, of Montpelier, has discovered a certain and speedy cure for asthma. It consists in injecting, by means of a trochar and canula, a few drops of a solution of the sulphate of atropine over the course of the pneumogastric nerve. The incision should be made in front of the sterno-cleido mastoid muscle, on a level with the thyroid cartilage. The trochar and canula should then be thrust in, till the point comes in close proximity to the sheath of the great vessels of the neck. The trochar being removed, a few drops of a solution containing about two millegrammes of sulphate of atropine (equal to .0308 grs. Troy), may be injected through the canula, and the end "promenaded" up and down a little, so as to bring the medicine in contact with as large a surface as possible. The constitutional effect is the same as when large doses of belladonna are taken. Under this treatment asthma is said to be cured speedily and permanently. The same operation must be performed on both sides of the neck.

We have never yet tried this plan of treatment, but think favorably of it. In asthma there is a spasmodic contraction of the minute bronchial tubes, depending on irritability of the nerve filaments. Any thing that will destroy this excessive sensibility will, temporarily, at least, afford relief. We are skeptical upon the permanency of cure effected by the sulphate of atropine, and will remain so until further evidence is adduced. Let all try the plan, and report their experience.

How to Preserve the Liquor Ferri Iodidi.—Much difficulty is often experienced in keeping this substance. It may be remedied by introducing into the bottle clean iron wire. The wire may be coiled neatly around a cedar pencil, the coil drawn out to nearly the length of the bottle, and dropped in. This will prevent its deteriorating.

Aristocratic Recipe for Itch.—M. Bourguington, its inventor, states that the ointment has a pleasant odor, and effects a certain cure after a single friction. Yolk of eggs, 2; essence of lavender, citron and mint, of each, 5 grammes; sulphur well pounded, 100 grammes; glycerine, 200 grammes; essences of canilla and cloves, of each 8 grammes; gum-dragon, 2 grammes. Mix well the essences with the yolks, add the gum-dragon; then to the mucilage add very gradually the glycerine and sulphur.—*Med. Times and Gazette.*

Color Blindness.—At the recent meeting of the British Association for the Advancement of Science, held at Aberdeen, Professor George Wilson, M. D., of Edinburgh, read a paper entitled "Some Statistics on Color Blindness." This term, he said, was not to be applied to a disease, but a remarkable type of vision. In giving an explanation of the nature of this visual peculiarity, he narrated some remarkable instances. "Color blind people," he said, "do not see the red in pink—they think it is white; and if we darken red with black, they stop seeing any red in it, and call it black before we do." This peculiarity is chiefly shown in the confounding of red and green, and in the matching or confounding of dark red and brown, in confounding red and black, and different shades of the same color. To illustrate this peculiarity, the Professor introduced the case of an upholsterer in Edinburgh, who covered a coffin with scarlet cloth, and of a gentleman of the same city who asked a lady with a red velvet bonnet for whom she was in mourning. The earliest recorded case of the sort is mentioned in an old number of the *Philosophical Transactions.* In the days when etiquette forbade any one but a clergyman, physician, or lawyer to appear in a black coat at a wedding, the bride's father was about to dismiss the bridegroom for appearing in this dress. He was only saved by the remonstrances of the fair bride, who appealed to the guests to satisfy her father that her lover had on a wedding raiment of the hight of the fashion—claret-colored. Many people exhibit this peculiarity in mistaking the color of flowers. Dalton, the chemist, discovered that he was color blind by hearing a geranium which he took to be blue, called red by various persons. Dugald Stuart, the philosopher, could only distinguish a cherry from its leaves by its form. We once knew a man who brought a black ribbon home to his wife instead of a scarlet one.

Poisoning by Sulphate of Morphia.

It is with painful regret that we feel called upon to chronicle a case of poisoning by the accidental substitution of Sulphate of Morphia for Sulphate of Quinia, in a prescription for the latter substance, dispensed at the store of one of our most accomplished apothecaries, by which an estimable lady met an untimely death. It was alleged in the testimony before the Coroner's jury, that the prescription was for twenty-four grains of Sulphate of Quinia, in eight pills; that it was received at the store by the chief clerk, who, having read it, and being busily engaged himself, requested an apprentice to weigh the quantity of Quinia; that the apprentice took the Morphia bottle by mistake, although it was distinctly labeled (and checked by the word "poison,") and weighed out the narcotic, which in this manner came to be dispensed. These are the simple facts of the case. The clerk delegating the business of weighing the Quinia was amply qualified as regards knowledge, and a graduate in Pharmacy; the person executing that request had been a year in the store, and *a priori* would be presumed to be competent to perform so simple a service. But whether he erred from *absence of mind or carelessness*, or from *misun-*

derstanding the order, his unfitness for the task was proved by the result. Enough has been said to prove how vulnerable are the best regulated stores to the occurrence of accidents, and to demonstrate that nothing but sleepless vigilance on the part of disciplined and responsible persons can guard against these distressing events.

It is proper to reiterate on this occasion, three simple rules, that if habitually followed, would go far to guard against such errors in prescriptions.

1*st. Whoever engages in dispensing a prescription, let him place the recipe before him, and concentrate his faculties upon it until it is clearly understood.*

2*d. Let him never remove a substance from a bottle without reading the label upon it, and feeling satisfied that it indicates the medicine intended by the prescriber.*[*]

3*d. Let the mental process of recognizing the contents, as being in accordance with the label, become intuitive by practice, and never omitted.*

But whilst we realize the terrible effects of this accident in its relation to the sufferer and her friends, and increase our watchfulness lest it should, in a new phase, occur to some of us; let us not forget the sympathy which is due to the apothecary, who, wounded in his reputation and business, and his keen sensibilities harrowed by the untimely, and too often ungenerous remarks of the unthinking public, finds the nine hundred and ninety-nine instances of careful and highly responsible service have been forgotten, if the thousandth falls short.—*Amer. Jour. of Pharmacy.*

Chromic Acid in Syphilitic Vegetations.—Mr. Hairon, after describing the advantages derivable from the chromic acid in certain forms of the granular eyelid, (a disease of common occurrence in the Belgian army,) observes that the trials he has made of the acid, as recommended by Marshall and Heller in syphilitic vegetation, have been attended with the most complete and rapid success. Moreover, its application, whether to these syphilitic vegetations or to the fungus granulations of the conjunctiva, is never attended with pain or reaction, notwithstanding the rapid destruction of tissue that takes place.—*Annailes and Ocoulistique.*

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[*] As there are so many synonyms for medicines, and physicians vary so often from the officinal names of the Pharmacopœia, the shop bottle and the prescription often disagree in the letter.

Tannin.—Introduction of tannin within the uterus is accomplished by means of crayons formed of tannin or gum tragacanth, one sixth of an inch in diameter and an inch long. They are passed, by means of forceps and speculum, through the os uteri into the cavity of the uterus, in which they are kept by means of charpie, moistened with a concentrated solution of tannin. The crayon slowly softens and dissolves, when it is replacd by another. M. Becquerel recommends this treatment in hemorrhage and diseases of the mucous lining of the womb.—*Philadelphia Med. and Surg. Reporter.*

Hæmoptysis.—Recently, after a trial of many other agents, without avail, and the tincture of gelseminum alone giving only momentary relief, I found a mixture of it with tincture of veratrum viride, in doses of twenty-five drops of the gelseminum with twelve drops of veratrum viride, answered completely. I have also found the extract of rhatany, combined with gelseminum or veratrum viride, of value.—*Dr. Miller.*

Chalybeates.—Iron should never be given in the enormous doses advised by some. One, or at least two, grains at a dose, and repeated two or three times a day—and from four to eight days, with an intermission of a few days, and then its use recommenced, will do far better than its continuous use. Bœrhave said:—"Give chalybeates in the most simple form, and we will have all we desire."—*Ibid.*

Digitaline in Spermatorrhœa.—Dr. Lucien Corvisart, a pupil of M. Chomel, reports three cases of obstinate nocturnal, and even diurnal, seminal losses, which were completely cured by the use of digitaline. We refer those who desire to learn the details of the treatment to Dr. Corvisart's paper—*Bulletin de Therapeutique.*

PHARMACY.

Electuary for Incontinence of Urine of Children—Chlorosis and Leucorrhea. By M. Crineaud.

℞.—Cannella, in powder,	375	grains.
Iron, in powder,	1000	"
Ergot, - -	140	"
Sugar, - Honey, -	*aa.* 1000	"

Mix well. Take one grain of it morning and evening.—*Reportoire de Pharmacie.*

Syrup of Coffee for Hooping Cough.—By M. Delairaye.

℞.—Coffee, in powder,	500 grains.
Boiling water, -	q. s.

Obtain by displacement 1000 grains of the liquid.

Alcoholic extract of belladonna,	10 grains.
" " ipecac,	10 grains.
Sugar,	2000 "

Melt in a water bath, and filter. Dose, for children three to five years old, fifteen grains morning and noon, and double the quantity at evening, in two or three teaspoons of hot water. For children of less age, half the quantity.—*Journal des Com. Med.*

Formula for Neuralgia.

Dr. Charles McLean, of Baltimore, recommends the following formula for that painful disease, neuralgia of the head and face—

℞.—Extract of Belladonna,	4	grains.
Aq. ammonia, -	6	fluid ounces.
Spirit terebinth, -	½	" "
Tincture opii, -	2	" "
Oil of olive, -	½	" "

Mix. Apply during the paroxysms.

Treatment of Dyspepsia.

In the course of a long practice in cases of indigestion, I have found the following prescription to have done good service:—

℞.—Prepared carbonate of iron, calcium of magnesia, pulverized elm bark, each -	ʒ i
Pulverized cubebs, - - - - -	ʒ ss.

M.

Take a teaspoonful, half an hour before eating, in half a teacupful of water.—*Boston Med. and Surg. Journal.*

BOOK NOTICES.

American Journal of Pharmacy. *Published by authority of the Philadelphia College of Pharmacy. Edited by Wm. Procter, Jr. Published bi-monthly, at $3 a year, in advance.*

It gives us much pleasure to notice this excellent and able journal, "devoted to the advancement of Pharmaceutical knowledge, including practical Pharmacy, Materia Medica, and Chemistry, in its general and implied relations, and to the collateral sciences, Botany, Mineralogy, Zoology," etc. The editor justly remarks, that it is intended for the benefit of the Druggist, Apothecary, and Physician, and, we echo, merits their patronage and support.

Pharmacy is the "art which teaches the knowledge, choice preservation, preparation and combination of medicines." Such knowledge is absolutely and essentially necessary to the druggist and apothecary, and to the physician, who has to compound his own medicines. New discoveries and improvements are being daily made in organic chemistry, and the art of preparing and compounding medicines increases in direct ratio. Hence the individual interest of each apothecary and physician should lead him to make himself familiar with all improvements, and all new agents introduced. The *Journal of Pharmacy* has, for the last thirty-one years, been an able exponent of Pharmaceutical science, and containing a faithful record of all discoveries and improvements in this department. At no time in its history, has it been more ably conducted, more interesting, or practically useful, than at the present, while under the control of its accomplished, intelligent and gentlemanly editor. We heartily recommend it to our readers, and will add the following extract from the Editorial department of the January number:—

OUR JOURNAL.—This number commences the thirty-second volume of our Journal—the eighth of the third series; and it is with pleasure that we congratulate our readers on the large proportion and variety of original communications it offers for their acceptance. It is the wish of the editor to make its pages the recipient of original observations from all sections of the country. It is almost impossible to practice Pharmacy without observing something new, but comparatively few take the trouble to record their experience for the benefit of others. Our Pharmacopœia is about to be submitted to a new revision this year, by a committee to be appointed in May, 1860, by the convention at Washington. Every new fact bearing on the subject should be brought forward in time to influence their action, and we shall be glad to receive communications of that character. Will not our Southern friends give us some comments on their experience in regard to the permanence (or keeping) of syrups, fluid extracts, ointments, and other preparations liable to change by the heat of their southern latitudes, and what precautionary measures they find necessary in regard to them?—*American Jour. of Pharmacy.*

HINTS TOWARD PHYSICAL PERFECTION; or, THE PHYSIOLOGY OF HUMAN BEAUTY. By D. H. JACQUES. Fowler & Wells: New York. 1859.

This little work is one of merit, and deserves a careful perusal. It is of special use to parents and those who are entrusted with the rearing of the young. The author claims that

Physical Perfection can be nearly approximated by the proper observance of physiological laws, before and after birth; and that parents are, to a great extent, responsible for the mental and physical endowments of their offspring. The book is written with clearness and impartiality, and the reasoning based upon the most approved physiological data. It contains much practical information on the mental and physical culture of children, rules for preserving health, the "secret of longevity," and the "art of beauty." A section is devoted to embryology. In this the author shows the manner in which peculiarities of mind and body, predispositions to various diseases, etc., are transmissible. He says: "Both the maternal germ and the vitalizing fluid which is destined to impregnate it, in common with the other secretions, must necessarily be modified by any condition of body or mind to which the individual in whom they are prepared may be subjected during the process. They must represent not only permanent traits of character and configuration, but also whatever is temporary and accidental in physical and mental states; and *especially must the condition of body and soul existing at the moment in which the generative act is consummated, impress itself upon the germ thereby vitalized.* Thus a fit of petulence or ill-humor existing at the time of conception, in a mother ordinarily amiable and sweet-tempered, will be transmitted to her child, marring irretrievably its disposition and character. In the same way a transient derangement of the digestive organs, a bilious attack, or a temporary torpidity of the liver, as well as the more chronic conditions superinduced by cancerous, scrofulous, or rheumatic humors, must inevitably affect offspring generated during its existence, imparting a predisposition to disease of the corresponding organs." The book should be in the hands of every parent and physician.

MARRIED—On the 3d of May last, in the town of Wilson, N. C., by Rev. J. W. Tucker, Dr. J. J. LAWRENCE, graduate of E. M. Institute, to Miss JOSEPHINE EDWARDS, daughter of B. Edwards, dec'd.

—November, 1859, Dr. R. W. KING, of Stantonburg, N. C., graduate of E. M. Institute, to Miss CARRIE BYNUM, of Wilson.

ECLECTIC

MEDICAL AND COLLEGE JOURNAL.

VOL. 1. MARCH, 1860. No. 3.

PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*Inflammation Not a Process of Combustion.* By Prof. H. D. GARRISON, M. D.

From time immemorial, physicians have regarded inflammation as essentially a "burning process;" and hence the name from *inflammo*, to burn. Modern pathologists, while regarding the old theory as indubitably correct, have, indeed, given it expression in terms more explicit and more in accordance with our definite chemical nomenclature. Until quite recently, no pathologist has dared, or perhaps even desired, to disturb an explanation apparently so just and impregnable. Nor can we marvel at the hitherto uniform concurrence upon this point, for when we reflect that inflammation is attended by an abnormally high temperature, and that oxidation is well known to be the principal cause of animal heat, nothing seems more natural than to regard the inflammatory process as a case of increased oxidation. Analogous processes of reasoning have induced thousands of physicians to treat the kidneys exclusively in cases of diabetes milletus, while the lungs and liver were alone at fault. The importance of interstitial oxidation as a calorigenetic process, is not for a moment to be lost sight of, or underrated. Indeed, under normal circumstances, it is, on theoretical grounds, more than sufficient to account for the highest animal temperature. But ere any important conclusion can be correctly deduced from these premises, the influence of perspiration—the great regulator of animal heat—must be duly considered. No processes stand more intimately correlated in the animal economy.

During vigorous exercise, the heart beats forcibly, and the breathing becomes deep and thorough. As a consequence the temperature of the body rises rapidly. But as soon as it has attained the maximum of normal variation, perspiration becomes profuse, thereby promptly and effectually preventing an elevation of the animal temperature, which would be incompatible with health. Perspiration is, in fact, to the animal, what the "governer" is to the steam engine.

Nothing can be more evident, than that a considerable interruption of either perspiration or respiration must seriously vary the temperature of the body. If oxidation be greatly impeded while perspiration is active, a chill must result; but if these conditions be reversed, the necessary consequence is fever. It would, however, be irrelevant to my present purpose to enter into a detailed consideration of these general phenomena, and their various causes and complications.

If we now recur to the facts in inflammation, we shall find, in every case, that the perspiration of the affected part is partially and often almost completely suspended. Hence the elevation of the temperature of the affected part, which is never so inconsiderable as it should be on theoretical grounds, if oxidation proceeded *only as rapidly* as in health. When the establishment of these disturbances becomes general, as is fre quently the case, the resultant phenomena are termed symptomatic or inflammatory fever. To show that the foregoing statements and explanations are neither the fictions nor hypotheses so often paraded by "would-be" expounders of pathological principles, the following chemico-pathological facts—most of which were developed and accurately established by the elaborate and masterly investigations of Professors G. Liebig and C. Lehmann—are submitted:—

1. In all acute inflammations, as peritonitis, pleuritis, hepatitis, pneumonia, erysipelas, etc., the number of *red corpuscles* in the blood is considerably *diminished*. Since to carry oxygen to all the tissues, is the special function of these bodies, no doubt can be entertained as to the effect of their diminution.

2. In all the foregoing diseases, including also inflammatory diseases, the amount of fibrin is increased. As is clearly shown in an able article by Dr. Greve (published in the January No. of this journal, 1860), fibrin must be regarded as an oxide of albumen on the ascending scale of metamorphosis. A few more equivalents of oxygen would effect its complete conversion into musculin, chondrin, etc. The remarkable increase of fibrin in inflammatory blood, therefore, simply shows, that there is present, in an available form, enough oxygen to effect the partial transformation of albumen, but not enough to complete its oxidation, as in health.

3. In every case of acute inflammation, the amount of uric acid in the urine is increased. Now it is well known, that by a simple process of oxidation, this compound, in the healthy

organism, is converted into urea, oxalic acid and allantoine. Therefore, an augmentation of uric acid in the urine can only be regarded as proof of imperfect oxidation.

4. In acute inflammations, and in all high grades of fever, lactic acid, which, under normal circumstances, is a rather variable and inconstant constituent of the urine, is excreted in unusually large quantities. I need scarcely add, that this can only be the effect of imperfect oxidation; for, as is well known, this acid, in a healthy organism, is usually completely converted into carbonic acid and water, a process evidently requiring much oxygen.

5. The *amount of carbonic acid* exhaled is *remarkably diminished* in all acute inflammations, even when the inflammatory action is confined to muscular tissue, and much circumscribed; but especially is this the case when the peritoneum, the pleura, or the lungs, become the seat of the morbid action. The quantitive determination of carbonic acid in expired air is comparatively easy, and the processes employed so free from blame as to admit of no reasonable doubt as to the accuracy of the results. Prof. C. Lehmann found, that in rabbits, in which he excited artificial pneumonia, more carbonic acid was formed immediately after the infliction of the wound than immediately before, but that as soon as the inflammatory process was established, the quantity *decreased rapidly*. The actual decrease is thus numerically stated for one experiment:—

"In every three hours, a rabbit excreted, at the mean temperature, the following quantities of carbonic acid:—

Two days before being wounded,	3.170	grammes.
Immediately after being wounded,	3.391	"
On the first day, - -	3.199	"
" " second day, -	2.914	"
" " third day, - -	1.877	"

The amount of carbonic acid excreted must be received as a most delicate measure of the activity of interstitial oxidation. Prof. Lehmann, in his excellent work on "Physiological Chemistry," very justly remarks:—"If inflammation were a process of combustion, the antiphlogistic diet must be exactly the reverse of that which we understand by the term."

In view of the foregoing facts, I may lay down the following aphorism: *Any remedy, or course of medication in inflammatory affections, which is calculated to increase the demand for oxygen in the system, without correspondingly increasing the supply, or the means of supply, is, so far, positively injurious.*

This principle is plainly applicable to cases of tuberculated, hepatized, or ulcerated lungs, in which aeration of the blood is always imperfect. Therefore, Ol. Jecoris, and similar oleaginous remedies, may prove positively deleterious, in as far as they create an extra demand for oxygen; but the injury they inflict in this way, is probably, at least, compensated by the important part they play in the formation of colorless corpuscules, which are undoubtedly the embryonic state of those vehicles of oxygen, the red corpuscules. The prescription of ample and suitable exercise, moist air, and frequent expansions of the chest, would probably benefit those affected with chronic pulmonary diseases, more than any known course of pure medication.

With regard to the now celebrated hypophosphites, it must be remarked, that, so far as they create a demand for an increased supply of oxygen without in any way furnishing the means, their use is plainly contraindicated in all inflammatory affections, and especially in diseases of the lungs, where respiration is seriously impeded. If, however, Mr. Churchill, or any other advocate of the hypophosphites in these cases, will be so kind as to demonstrate, or even show, upon fair theoretical grounds, that hypophosphorus acid is really first deoxidized, the phosphorus being assimilated, and again reoxidized into phosphoric acid, I shall be most happy to retract, or, at least, modify this chemico-pathological objection to their administration in the foregoing cases.

The old practice of venesection in inflammatory diseases and fevers—now quite generally repudiated by transatlantic physicians—is *preeminently reprehensible*, for, besides removing other necessary constituents of the blood, the red corpuscules, already much reduced in numbers, are directly diminished. I am truly at a loss to comprehend why certain American physicians, who assume the responsible positions of teachers and authors, should, despite the positive teachings of science and multiplied experience, continue to practice the most copious and indiscriminate venesections. Can it be possible, that the dictates of conscience are so far unheeded, that a kind of puerile perverseness induces them to continue in willful mal-practice?

In confirmation of the above principles, I can not omit calling special attention to the well established antiphlogistic power of certain compounds rich in oxygen, viz., nitrate of potassa, chlorate of potassa, free nitric acid, etc. The chlorate of potassa in my hands has proved itself capable of promptly arresting the excretion of sugar in dialectic urine, which, however, returned in a few days after the suspension of the remedy, only to again disappear when its use was resumed. Dr. Hays of Indiana, lately informed me that a trial of the chlorate of potassa in about eighty cases, had induced him to regard it as almost infallible in all diphtheritic affections, and in the malignant form of scarlatina.

My own experience entirely corroborates the statement of Dr. Hays. In subacute inflammations of the stomach, aphthæ, salivation followed by sloughing, etc., this salt has already a firmly established reputation. One equivalent of chlorate of potassa yields with great readiness one equivalent of chloride of potassium, and six equivalents of free oxygen, which it is believed fully explains its *modus operandi* as a therapeutic agent.

Cincinnati, *Jan.* 25, 1860.

ART. II.—*Gossypium Herbaceum.* By B. KEITH, M. D.

The profession are probably aware of the fact, that valuable medicinal properties have been ascribed to a decoction of the cotton root by physicians of the southern portion of our country for several years past, but it is only within the last few years that it has attracted general attention, during which period conflicting statements, concerning its medicinal powers have, from time to time, appeared in medical journals. To the oil of the cotton seed I have never seen medicinal qualities ascribed; neither have I been able to discover any. After various trials with various parts of the plant, the matter seems to resolve itself to this simple fact, that it is to the *bark* of *the root* to which we must resort for a valuable medicine.

My experiments with the Gossypium commenced in 1855. I procured a large quantity of the whole root from South Carolina, and, after various chemical manipulations, obtained a substance of a brownish color, closely resembling a resin in nature. I could not discover any other constituent to which I could ascribe medicinal virtue. The use of the above, by myself and several physicians, gave no results showing any medicinal effects whatever.

The continued call of several physicians, who had used the cotton root, induced me to make another trial. I procured a carefully gathered and cured sample from Georgia, but with a like result. Both lots appeared well, and gave no external signs of deterioration, or of absence of any of their constituents. The next lot was from Arkansas. This was passed through the several processes, and, to my surprise, results were obtained entirely different from those from former trials. The result has demonstrated to my mind, that the remedial powers of the Gossypium Herbaceum reside in *two* of its constituents, namely: a resinoid and neutral. I now think that, from circumstances, such as variations of soil, culture, time of gather ing, etc., the several principles of the two lots at first experimented with, were not perfected, and that the imperfect substance obtained was but a portion of the resinoid, that in a specimen gathered at the right time, would have been complete.

To these two principles in consideration, I have given the name, *Gossypiin.*

The Gossypiin, I have found to be, emmenagogue, tonic, alterative, and, large doses, abortive. The specific effects, or those of which the patient complains, when given in large doses, are, vertigo, pain in the head directly over the eyes, obstructed vision, and very large doses will produce syncope.

In Amenorrhea, where there appears to be no necessity for any medicine but emmenagogues, I give them from four to six grains at night, on retiring, and half the quantity in the morning.

If the bowels are constipated, I give the following powder at night:—

℞. Gossypiin, grs. iv.
Podophyllin, " ss.

If the patient, from weakness of the stomach, can not bear the Podophyllin, I substitute the Enonymin, say, from one to two grains.

If the patient is suffering from sickness at the stomach, I administer the following, night and morning:—

℞. Gossypiin, grs. iv.
Senecin, " ij.

If there is irritability about the bladder, accompanied with a desire to void urine often, the following powder, three times per day, I have found very beneficial:—

℞. Gossypiin, grs. iij.
Populin, " ij.

Or, the following:—

Gossypiin, grs. iij.
Barosmin, " ij.

If stimulating medicines are needed, combine the Xanthoxylin with the Gossypiin; if laxative tonics, the Cerasein or Cornin.

In cases of Amenorrhea, of long standing, where the countenance becomes pale, the administration of the Gossypiin will be followed by increased appetite; the glow of health again appears on the cheek, and the natural flow is resumed.

In recent cases, the Gossypiin should be given in six to eight grain doses at night, and in smaller doses through the following day.

In relation to its abortive power, I have seen its effects in two cases. A quantity of a tincture had been administered, that would, as near as I could judge, represent eight grains of Gossypiin, three times a day for three days, when abortion took place. In both cases, the article had been administered by an abortionist, who informed the women that it was a "sure thing."

The alarming symptoms of impending dissolution, induced them to call for me. One patient had miscarried just previously to, and the other six weeks before, the time of my first visit. Both presented the same symptoms; pale and weak, with profuse hemorrhage, continued from the time of their miscarriage, and not able to move, from weakness and fear.

On examination per vagina, I found the mouth of the uterus much dilated, and very sensitive. Administered Gelsemin in ¼-grain doses, every four hours, until the hemorrhage ceased, when the patients gradually recovered health and strength. I would here remark, that I have found the Gelsemin very efficient in controlling hemorrhage, and producing uterine contraction.

That the Gossypiin possesses a controlling influence over the uterine organs, I have no doubt; but to what extent, I am unprepared to say. I am aware that no article can be *proved* in the treatment of a few cases; but, so far as my experience extends, I have no doubt that it will be found a valuable addition to the materia medica.

I shall pursue my investigations in relation to the use of the Gossypiin, and trust that the portion of the profession who desire to establish the merits of the Cotton Root, will also enter upon the work.

New York, *January 2d*, 1860.

Art. III.—*Extracts from the "American Eclectic Materia Medica.* By Profs. Jones and Scudder. (Just published.)

Scrophularia Marylandica. *Off.* Scrophularia. *Sex. Syst.*—Dydynamia Angiospermia. *Nat. Ord.*—Scrophulariaceæ. (The leaves and roots.)

History.—This plant, known by the common names of *Figwort*, *Head-all*, *Holmes Weed*, etc., is indigenous, growing in many parts of the United States.

PHYSICAL PROPERTIES.—The leaves have a rank, somewhat fetid odor, and a bitter, disagreeable taste; the root has also an unpleasant odor, but its taste is sweetish and somewhat acrid. Water and alcohol extract its medical properties.

THERAPEUTIC ACTION.—It is said to be Alterative, Diuretic, Emmenagogue, Discutient, Vulnerary, Emetic, and Cathartic.

The medical properties of this agent, and its therapeutic uses, have not been properly investigated. It seems to be an article unknown to the profession, at least but very few have exhibited it in any case. Judging from our somewhat limited knowledge of its virtues, and from the reports of those who have made much use of it, there can not be a doubt it is one of our much neglected indigenous plants, which, if properly investigated, would be esteemed a valuable acquisition to our list of American remedies.

Refinesque, in speaking of the plants belonging to this genus, says they are Vulnerary, Resolutive, Antiscrofulous, in decoction, poultice and steam-bath. Much used in New Jersey and New York.

The species now under consideration, and the only American species which we have known used, is a favorite remedy with many, in struma, in all its multifarious forms, taken internally in the form of decoction, tincture or sirup, and applied locally as a poultice, wash, local or general vapor-bath, ointment, etc., depending upon the form in which the disease manifests itself upon the surface. Marked benefit has often been clearly referable to the use of this agent.

In chronic cutaneous diseases, used both internally and topically, it often affords relief. Obstinate ulcers, the result of a depraved state of the fluids and solids, are frequently benefited by its use. Secondary or ternary syphilis calls for its exhibition. In chronic glandular diseases and visceral obstructions, it has been found eminently beneficial, especially in hepatic torpor, and other morbid and deranged states of that viscus. In menstrual obstructions or irregularities, dysmenorrhea, etc., some esteem it almost a specific. Some of our class of physicians entertain such confidence in it, that they have used it in their practice almost exclusively in the cases named for many years, and, as they say, with entire success. It is recommended in dropsy. Dr. J. Davis informed us he had used it with success in that disease. We presume it would be found most useful in those cases arising from visceral obstructions, glandular enlargements, etc. Smith says it restores lochial suppressions, and proves useful both before and after child-birth.

If taken in very large doses, it is said to cause emesis and atharsis.

Scrophularia is applied topically as a local anodyne, discutient, or resolvent and vulnerary agent. The fresh or even dried leaves may be bruised and simmered in milk and applied to cuts, bruises, painful and irritable ulcers, piles, swelling of the mammary glands, local inflammations, cutaneous eruptions, and abrasions of the surface, to relieve pain, allay irritation and inflammation. The root is also made into a poultice or fomentation, and employed to discuss indolent tumors and glandular swellings.

Decoction.—℥j of the bruised root to Oj of water. Dose, ℥j, or from half a pint to a pint of the decoction may be taken daily, if the stomach will bear it; or it may be used in the form of a simple sirup, or compounded with other agents.

SIRUPUS SCROPHULARIA COMPOSITUS:—

℞. Scrophularia, ℔j.
Stillingia and Iris Vers., *aa*, ℔ss.
Podophyllum, ℥iv; coarsely pulverize each.
Sugar, ℔iv.
Oil of Sassafras, and Oil of Gaultheria, *aa*, gtt. x.
Boiling Water, Cong. ij.

Macerate the powders for twenty-four hours, then boil down to Oij; express the liquid, add more water, boil and express again, and repeat the process until the expressed liquids amount to three quarts, add the sugar, then apply heat until it boils, remove any scum that may rise upon the top, then rub the oils with a small quantity of the sirup, and intimately mix with the remainder.

Dose—℥j to ℥ij, repeated three or four times daily.

It is alterative, deobstruent, and laxative—useful in scrofula, secondary syphilis, glandular enlargements, visceral and hepatic affections. Or it may be prepared by taking—

Scrophularia, Celastrus (bark), and Rumex (Crispus or Obtusifolius), *aa*, ℔j.
Sassafras, ℔ss.
Sugar, ℔iv.
Boiling Water, Cong. ij.

Macerate the scrophularia, celastrus and rumex, for twenty-four hours, with gentle heat, then boil to two quarts, and express the liquid, add water and boil again, and repeat the process until the strength is extracted, then reduce the liquids to three quarts; add the sassafras while hot, and maintain gentle heat, keeping the vessel closely covered for several hours, strain, express the residue, then add the sugar, maintaining the heat until it is dissolved (the vessel being still covered), when the essential oils may be added, as in the preceding case.

Dose—From half to a wineglassful, three or four times a day. It is alterative, and useful in scrofula, cutaneous and glandular diseases.

Unguentum Scrophularia.—Fresh leaves of Scrophularia, and Prepared Lard, of each two pounds; Prepared Suet, one pound. Boil the leaves in the fats till they are crisp; express and strain the product.

HYPOPHOSPHITE OF LIME. *Formula.*—$CaO. + 2HO, PO$.

PHYSICAL PROPERTIES.—"Hypophosphite of Lime is a white salt, with a pearly, margarin-like luster, and crystallizes in flattened prisms. It is soluble in six parts of cold water, and in not much less of boiling water; it is soluble slightly in diluted alcohol, but insoluble in alcohol, sp. gr. .835."—*William Procter.*

THERAPEUTIC ACTION.—Hypophosphite of lime is an agent that has been lately introduced into the practice of medicine, and but few as yet have thoroughly tested it. We have employed it for the last three years; and from our experience, which has been large, would recommend it to the favorable notice of practitioners. Like all other agents, it requires experience to use it so as to obtain its full influence.

We consider the hypophosphites as belonging to the class of *restoratives*—agents that add to the body a material which is deficient, and that they are useful when the disease depends on the want of such materials in the blood. "The importance of the element, phosphorus, in the human economy, has not been appreciated until quite a recent period. The amount present in the brain, as shown by investigations at the Cambridge laboratory, a few years since, is much larger than was supposed. Not only had the best chemists of Europe fallen into error in their estimates of the quantity of phosphorus, but also in that of sulphur, the element so closely allied to phosphorus in its uses and chemical affinities. The vital importance of these agents in maintaining a normal condition of the system, can be understood by a consideration of the probable fact, that, in all the operations of the mind, every effort requiring an expenditure of nervous force, they are called into action."—*Nichols.*

We frequently find cases in practice in which there is undoubtedly great depression of the nervous power; in fact, want of innervation: cases of chronic disease, in which this depression of nervous force appears to be the paramount disease—at least, the hardest to treat. It is in such cases, that we have obtained the most benefit from the administration of the hypophosphite of lime. We do not, however, look for immediate benefit. The agent has to be appropriated by the system, and it may be days, or even weeks, before its influence is apparent, but we have never been disappointed in its effects at last.

We have employed it in those severe cases of nervous depression arising from disease of the genital organs, as *masturbation*, *spermatorrhea*, etc., with good results; also, in diabetes, and some other affections of the kidneys. In the early stages of phthisis pulmonalis, we know of no agent capable of producing such marked beneficial influence upon the disease. Why it increases the strength of the patient, the tone of the digestive organs, relieves cough and oppressed respiration, etc., we are unable to say; but of the fact, we are confident. In this disease, however, we do not depend upon the administration of the hypophosphites alone, but use other means to check irritation of the lungs, restore the normal quality of the blood, keep the excretory organs in a normal condition, and especially see that the patient takes just as much exercise in the open air as his system will bear.

We have employed this agent in many other diseases with apparent good results, but still do not feel like giving a positive statement, until after further investigation. Dose, from gr. v to gr. xv.

SIRUP OF HYPOPHOSPHITE OF LIME:—

℞. Hypophosphite of Lime, ʒj.
Water, fʒ ixss.
White-sugar, ʒxij.
Fluid Extract of Vanilla, fʒss.

Dissolve the salt in the water, filter, add the sugar, dissolve by aid of heat, and add the vanilla.

This is a very good preparation of this agent. Dose, from a teaspoonful (3½ gr.) to a tablespoonful (14 gr.), according to the circumstances of the case, three times a day.

ART. IV.—*Incipient Varicocele.* By Prof. E. FREEMAN, M. D.

In a subject, lately dissected before the class of the E. M. Institute, I noticed a peculiarity, to which I called their attention, and which I think worthy of a further notice.

It was incipient varicocele in the left spermatic vein, and the termination of that vein in the left suprarenal vein, instead of the left renal vein. Also, the situation of the left renal vein behind the artery, and its passage *behind* the aorta, instead c in front, to reach the descending vena cava; while the supra-renal vein passed in front to terminate in the vena cava.

Varicocele occurs more frequently on the left, than on the right side; and the reason usually assigned is, the indirect course of the blood of the left spermatic vein, to reach the great central ascending current in the vena cava; it being subject, firstly, to a longer passage up, the vein on that side being longer than on the other; secondly, to obstruction from pressure of the sigmoid flexure of the colon; thirdly, from obstruction from meeting at right angles a column of blood in the renal vein, and then one again in the ascending vena cava. In this case, the spermatic vein, instead of having the large canal of the renal vein to terminate in, opened into one but slightly larger than itself. It can be easily seen, what effect this might have upon the circulation of blood in that vein, and how much more its free passage toward the heart would be retarded, than if it had entered the renal vein. The question now arises, whether, in the great number of cases of varicocele that occur, there is not a peculiarity in at least some of them.

174 Vine st., *Cincinnati*, *Ohio.*

PART SECOND.

SELECTIONS.

Some Remarks on the Action of the Skin in the Production and Treatment of Disease. By EDWARD SMITH, M. D., LL. B., L. R. C. P., Ass.-Physician to the Hospital for Consumption, etc., Brompton, etc. (Read before the Medical Society of London, May 30, 1859.)

I purpose, in this paper, to consider only a few of the subjects which might be embraced in the title which has been already given, and to select those which have occupied my own thoughts, and which have afforded me useful hints in practice. I shall therefore be excused if I do not refer to matters which have doubtless been more familiar to the minds of many Fellows present than to mine; and as the paper is not based upon any new experimental inquiry, I must also ask your indulgence if I should have the misfortune to refer to elementary facts. If I need to offer an apology, it is the hope that a consideration of the action of the skin, in certain points of view, ·v not be unprofitable, and the belief that, elementary as the subject may be, it has not been so generally a guide to treatment as I think it deserves.

In practice, we regard the skin in three points of view:—*1st*, As having a vicarious action, as is more particularly affirmed to occur in hot climates; *2d*, a depurating action, so that when this action is suspended serious local or general disease supervenes, as is familiarly illustrated by common colds; and, *3d*, a modifying power in reference to the heat of the body. Such is the kind and almost the extent of our practical knowledge, for on no one of these points have we as yet much more than the results of common practical observation. In considering this subject minutely, we must always bear in mind the structure of the organ as well as its position and extent. The points which are capable of demonstration are the great extent of the organ; its exposure to the influence of external agencies; its vast endowment of blood-vessels, with power of varying the blood in them, and of nerves from the cerebro-spinal and sympathetic systems; its protective covering of non-sensitive and non-vascular material; its sweat glands and ducts, and its sebaceous glands. Hence, it is evident that its two great functions must be the elimination of fluid with various matters in solution, and the perception (so to speak) of the presence of external agencies. Each of these has its consequent influences, and I purpose to consider them in the order now given.

It is of common belief that the skin has the power to eliminate gases, and, particularly, that it is, or may be, vicarious of the lungs in the elimination of carbonic acid, and experiments upon the lower animals are cited in illustration. But it must be observed that the structure of the human skin offers no countenance to this statement, for the thick epidermis prevents the direct contact of the air with the capillaries,—a striking contrast with that observed in the lungs; and as the only openings in the skin lead directly to glands in which a watery fluid is eliminated, they afford but very small provision for the elimination of gases. On this point I feel assured that practical men have fallen into great error, and, indeed, that in this particular the skin is not, nor can be, vicarious of the lungs. In my experiments, I obtained only six grains of carbonic acid per hour, although I maintained a natural state of the skin by passing a continuous current of air over it, whilst the body was inclosed in a caoutchouc bag. This would yield but somewhat over 100 grains in twenty-four hours, and contain only about ℈ij. of carbon, whilst the quantity of carbon emitted by the lungs, during the same time, would be about 8 oz. avoirdupois. If this be true (and there have not been any other experiments by which the products of the skin could be accurately determined apart from those of the lungs), I venture t affirm that, in this respect, the action of the skin may be disregarded.

The elimination of water, with certain substances in solution, is, however, incontestible; but, in reference to the former, I think that it is not its mere elimination by the skin which is essential, since, although we drink and eat two or three pounds or more of water daily, which must be again removed from the system, it is clear that the kidney is the natural outlet for that fluid, regarded simply as an effete or used substance. It has its importance rather in being a vehicle for the removal of other matters, and for the physical effects which accompany the peculiar manner in which it is removed from the body. Of these matters little is really known, but two things are tolerably certain, viz., that there is free acid, as lactic, capriolic, and acetic acids, and that these acids and products are rich in carbon. When we bear in mind the large amount of acid which is either taken into or is produced within the system, and the absolute necessity which exists for a due balance being maintained between the acid and the alkali in various parts of the system, we become impressed with the importance of this function—a function which has been proved to be the most active during the primary processes of digestion, or the period when there is the largest quantity of free acid in the system. It is known that the general reaction of the blood is alkaline, and that this must be so in order to maintain the iron and albumen in solution, the retention of the blood within the vessels, and the conversion of free acid into carbonic acid; but, at the same time, there is always a large amount of free acid after meals (so that the blood is acid in places), which must be rapidly converted or expelled, or the depurating function of the blood would cease. Yet, on the contrary, the reaction of almost every other fluid is acid; and this is as essential to the formative process or that of growth, as the contrary is that of assimilation and depuration. The action of the skin tends to maintain the required equilibrium, or rather, by the constant elimination of acid, to render the blood more alkaline. Hence, within limits, the free action of the skin is more compatible with perfect respiration and assimilation than it is with formation or growth; and this is conformable to common observation. The practical importance of this question is this—is the amount of acid eliminated by the skin an indication of the amount existing in the body, so as to become a guide in treatment? This guide has been sought rather from the kidneys and the stomach than the skin; but I believe that it may be obtained with more certainty from the skin, and especially when it refers rather to the constitutional tendency than to the actual state of the patient. Whenever it can be shown that there is an excess of acid passing off by the skin, it must indicate one of two things—first, either that there is an actual excess of acid supplied to the system, or that, with the usual quantity of acid, there is deficient power of transformation or resolution, and therefore, in both cases alike, there is an absolute excess of acid remaining in the blood. This may indicate lessened respiratory changes, both as cause and consequence, for Liebig has shown, that with excess of acid there must be a lessened capacity in the blood to absorb and carry carbonic acid. The indication of the presence of much excess of acid in the perspiration is readily determined by the sense of smell, for in such cases the patients are disagreeably aware of the existence of a strong acid and offensive odor. It is also evident to the usual tests for acid, and I may mention that Sir Benj. Brodie, by casual observation, found that if he took exercise before breakfast, litmus paper showed the presence of much less acid than when it was taken after a meal. If by either means we determine the existence of this excess of acid, we shall readily infer that the total amount of acid excreted is the greater as the amount of perspiration is greater. Hence I regard the skin both as indicating the condition of the fluids within and as controlling the formative process, it being itself chiefly under the control of the respiratory and assimilative processes. This condition of skin, just pointed out, very rarely occurs in persons with excess of fat, but is more commonly observed in those who are thin, or losing flesh, and in whom the appetite and digestion are failing. I find it to be of extremely common occurrence in phthisis, in which disease the respiratory or transforming function is so much reduced, whilst the amount of acid or acid-forming food is not so much lessened; and, indeed, so offensive is the odor in many cases, that the patients hesitate to state it, and the room in which they have stripped and been examined is intolerable until a free current of air has been passed through it for some time. Hence the importance of the skin in indicating disease and in producing or tending to emaciation is very evident, and not merely (as we rather believe) from an excessive elimination of water, but of free and highly carbonized acids. As an indication, I think it of the utmost value, and it is one of our best aids in selecting treatment.

We shall, I think, be astonished, if we reflect upon the vast extent to which acids or alkalies enter into our prescriptions, since we shall find that all treatment, having reference to the general system or to the processes of alimentation, almost necessarily call for one of these substances. We must also admit, that whilst experience guides us in our selection, based as it is upon a few general rules, we more frequently act empirically, and it must be of advantage to know the grounds upon which we base our hopes of success. In the cases to which I have referred, we can not doubt that alkalies are demanded with a view to aid the respiratory and transforming process by which the excess of acid is to be reduced; and as Liebig has shown that soda is the base which, when conjoined with phosphoric acid, has the greatest capacity for carbonic acid, we cannot hesitate to select it. I commonly give a mixture of the carbonates of soda and potass, in 25 to 45 grain doses thrice a day; and if, at the same time, free acids, or the food which most abundantly forms acids, viz., starch and sugar, is regulated, we may usually restore the balance required. I have seen most valuable effects follow this plan, and in one case they were so marked as to be well impressed upon my memory. It was that of a young man living in a country town, and occupied in a shop, and who attended as an out-patient at the Hospital for Consumption. He chiefly complained of languor and general debility, with lessened appetite, and wasting, and with those there was always an excessively acid state of the perspiration, although he was a respectable man, neat and clean in his person. After a course of treatment for some months, during which nutritive food, cold bathing, exertion in the open air, and similar restoratives, were employed without benefit, I employed the potass and soda; and soon afterward, with the occurrence of a sudden most profuse and acid perspiration, he obtained immediate and permanent relief.

Hence, the organs which are more particularly in correlation with the skin are not the lungs, but clearly the kidneys, as is seen both by their common power of eliminating water with free acid and peculiar matters, and by the vicarious action which each can in a degree undertake for the other, as is commonly observed in reference to water by the kidney, and more rarely in the excretion of urea by the skin.

I would also ask attention to the significance of this skin indication in reference to the administration of fats. I omit any reference to the impropriety of administering them in states of deficient skin action, as in fevers, and refer only to the acid state of the excretion. Fats require an alkali for their emulsion, in such a state as is found in the pancreatic fluid, and any excess of free acid is opposed to it. When there is such an excess, as is indicated by the state of the perspiration, it will almost always be found that fat is disliked, and is less tolerated than in other conditions. In some cases, the co-ordinate administration of an alkali meets this difficulty; but usually the alkali must precede, and the excess of acid be removed before the fat can be employed. In what may be termed acid constitutions, there can be no doubt that the use of fat tends to correct that tendency, and the only difficulty is to bring about its due assimilation. This may be effected where there is no excess of acid actually existing, and, at the same time, by diminishing the supply of acid or acid-forming materials. The greater tolerance of fat in cold weather and cold climates than in hot, with the respective tendencies to the production of acid, clearly indicate this fact, and for some time I have found it to be a valuable guide in practice.

I do not enter into any description of the contrary condition of the perspiration, or that in which there is a lessened elimination of acid, for I do not think that the skin affords much evidence of the fact—evidence which must rather be sought for from the lungs, with their power of eliminating free alkali, or from the kidneys, in the secretion of which an alkaline or neutral reaction is so readily perceived. In such cases, however—viz., those in which there is an unusually alkaline state of or tendency in the system—I believe the skin is always soft, lacking tone, and most readily perspiring; a state which has its importance not so much in reference to the maintenance of the balance of acids and alkalies as to the heat-regulating process.

The heat-regulating process is that which ought to be regarded as the function *par excellence* of the skin, and is that for which all its physical characters and relations so well fit it. All the excretory organs, it is true, take a share, directly or indirectly, in this process, since, in the ordinary relations of the temperature of the body and the external air, there will be a loss of heat whenever the products of excretion quit the body; but the skin and the lungs are the true refrigerators of the body. The necessity for this action is very evident on reflection, and its nice regulation by processes within the system, and almost beyond the necessity of the control of the individual, is probably the most wonderful evidence of wisdom and design to be found in the animal economy. Thus, whilst almost at all times the surrounding air is abstracting heat from our bodies, nature supplies us with food, and regulates our appetite for that food in almost precise correspondence with the necessity. Thus, in the combustion of carbon, whether within or without the system, 13,510 units of heat are generated, and more than three times as much in the combustion of hydrogen, viz., 41382 units,—the units being that amount of heat which would raise an equal weight of water 1°. Now, when we know that no less than about 8 or 9 oz. of carbon, and between 30 and 40 oz. of oxygen, will be evolved from the system in a day of rest in a healthy adult, we may form an idea of the amount of heat which is being generated every moment, and particularly during the period of digestion. It has been calculated that, in the combustion of 31·56 oz. of oxygen with 7·32 oz. of carbon, and 1·5072 oz. of hydrogen, sufficient heat is generated to raise 20·754 lbs. avoirdupois of water 1°. In the ordinary state of the system, even when at rest, there can be no doubt that this amount of heat at least is generated, and during considerable exertion it is nearly doubled. When, therefore, this very large amount of heat is being produced, and chiefly during certain hours or a small part only of the day, and yet, at the same time, it is necessary that the internal parts of the system should be maintained at a certain and very nearly uniform temperature (since, with an elevation of even one or two degrees, we find most serious febrile disturbance), the importance of a self-acting heat-regulator is very evident. As I have already said, the lungs share with the skin in this duty, but only in a very moderate degree, for when the temperature of the external air increases, and thereby, we would infer, the necessity for refrigeration increases, *pari passu*, the lung action lessens; and the contrary occurs in the contrary condition of cold. As mere radiating surfaces, both the skin and the lungs would be not only inadequate to regulate the temperature, but, as just mentioned, this inadequacy would be increased at the periods of the year when the regulation is the most imperative. Hence arises the importance of the elimination of fluid from the body by the skin, not simply to get rid of the fluid, but by its conversion into vapor, and consequent absorption of latent heat, to regulate the temperature of the body—a process which, as we know, is in great part self-acting and self-regulating, but which is, at the same time, amenable to, and is then in proportion to, voluntary efforts. Taking the specific heat of water as 1, that of watery vapor at the temperature of the body is upward of 1000; that is to say, the same weight which as water could only absorb 1° of heat, would, as watery vapor, remove more than 1000° of heat; a power which, if it were not self-acting, would be uncontrollable and destructive to the system. Nothing can give us a greater idea of the importance of the function of the skin than this very fact, and especially when we bear in mind the vicissitudes through which we pass every year, and the great diversity of the requirements of extreme climates. Moreover, the latter shows, in a marked manner, the greater importance of the skin than the lungs as a regulator of heat, since we know that, in the polar regions, the air is inspired at a temperature above 60° and more below freezing-point, and in the tropics 60° and more above the freezing-point, and yet the lung surface is in each case nearly alike unprotected, whilst the skin is defended in the most diverse manner in the two conditions.

Hence an excessive action of the skin must tend to the waste of heat, with its consequent narcotism and exhaustion, and a defective action to a preternatural elevation of temperature with its febrile evidences. There is a further contingency resting upon this, which is also of the utmost moment, viz., the regulation of the distribution of the blood in reference to the centers and the superficies, a circumstance to which congestion on the one hand, and inanition on the other—that is to say, excessive or defective vital actions in the different organs—must be due. We know that, with heat, there is more blood distributed to the superficies, and the circulation is carried on more rapidly than in the contrary conditions; and, therefore, in the former state there will be less vital action proceeding at the centers, viz., in the principal vital organs, than in the latter. On this point, I beg to refer to papers by Mr. Ranald Martin, F. R. S., and particularly to a report by Mr. Longmore, an East Indian surgeon, recently published in the *Lancet*, on the subject of heat apoplexy, or, as he calls it with great propriety, heat asphyxia. It results from a consideration of sixteen cases. The majority of the cases occurred under circumstances of exposure, and at a period of the day when the influence of high temperature was certain. None occurred instantly, as from a *coup de soliel*, and in eleven there were no symptoms remarked antecedent to the apoplexy. When the onset was not very rapid, say some hours, there was listlessness, torpidity, tendency to lie down, drowsiness, and, what I wish particularly to mention, desire to micturate frequently. In the advanced stage there was intense heat of skin, greatly exceeding that of fever, with brain symptoms, irregular and excited action of the heart, difficult respiration, convulsons, and coma. Mr. Longmore himself calls especial attention to what is called irritability of the bladder, but he does not give any explanation of it, and values it only as a warning. To my mind it is, however, clear, that its significance is in relation to the action of the skin; for although no mention is made of the skin in the early stage, it is stated that its functions were suspended in the advanced stage, and it is more probable that the desire to micturate was indicative and vicarious of deficient skin action in the early stage. It will be borne in mind that, under the circumstances mentioned, the body would receive and not lose heat by radiation, and hence that the excess of heat due to this cause and to the combustion of food could be got rid of only by the process of vaporization. It is easy to perceive that there must be a point at which these two sources of heat may demand a more active conversion of fluid into vapor than the circulation of the blood and the introduction of fluid into the stomach are able to furnish; and hence that the process of heat can not be got rid of, even assuming that the vaporization is inordinately active, and much more if, from any cause, this action is lessened. No doubt, in most cases, the most efficient method is the direct abstraction of heat by the free use of cold water, as Sir Hugh Rose is reported to have repeatedly done on himself in his celebrated India marches, and as I have felt when riding for hours exposed to the sun at a temperature of 120° to 130°, when lying down in every shallow stream, or dipping the head in a bucket of water, was the greatest of earthly luxuries. But where this can not be, or in addition to it, there can be no doubt that the most urgent aim should be to increase the action of the skin. This I have shown to be the most readily and efficaciously effected by the frequent repetition of small doses of tea, taken cold or hot, and to be most certainly prevented by the exhibition of alcohols.

On the other hand—and this is more commonly the fact in this country—it is quite possible to have the skin too active, either absolutely or in reference to the amount of vital changes proceeding in the system, in both cases alike unduly robbing the body of heat. This is the meaning of the importance of cold sweats, which we find so frequently in cases of great exhaustion, whether with or without serious organic disease, and in many people under the influence of sudden fear. In phthisis, and in states of debility which so frequently lead to it, this at some period is our greatest difficulty, for it is impossible in such cases (at least in a rapid manner) to increase the combustion of food, and our only chance is to administer remedies internally which lessen the action of the skin, or the external use of some stimulant or salt, or of some defense, as oil; and in cases where the organic mischief or defective power for assimilation are barriers to the increase in the production of heat, these expedients can have only at the most a temporary good effect. Wherever, then, with perspiration, the skin is cold, we may be sure that the organ is too active, and must seek to lessen the activity on the one hand, and on the other supply the heat which is thus unduly wasted. I have mentioned the external use of oil as tending to lessen the activity of the skin; and as I referred to it in a discussion which took place here a few weeks ago, I will only state that it does so by offering a physical obstacle to evaporation, and that I have, from experience, good reason to press its employment in such cases. In using it, however, the skin must be covered by it, and the covering must be maintained or renewed as often as it is removed. In all cases of soft and perspiring skin, and particularly where the appetite and powers of digestion and transformation are defective, it is a most useful adjunct to treatment.

I regard such cases, indeed, as diseases of the skin, and they constitute a very large proportion of cases presenting themseelves as out-patients at the Hospital for Consumption, and the condition, I believe, is a very common precursor of phthisis. It is also of most significant importance in cholera, in which the soused and cold skin is so constantly present. So, on the other hand, in fevers, we must regard the suspension of the action of the skin as *the* disease, essentially leading, as it will, to internal derangement, or as being a most important part of the disease and the greatest obstacle to recovery. In practice we recognize the fact, for in the former it is the common practice to protect the skin by clothing, to lessen its action by acids, and to promote the combustion of food by tonics, whilst in the latter the essence of the whole treatment is to restore the action of the skin, to lower the temperature of the body, and, in the meantime, to increase the action of its correlative organs.

The importance which these conditions of the skin have in relation to other processes in the system, is greater than will appear at first sight. Thus, in reference to the pulse:—In states of great skin activity, there must be a frequent action of the heart in order to supply watery fluid to the skin with sufficient rapidity; and hence, in hot weather, the pulse is more frequent than in cold weather, and then, instead of being an evil, it is the safeguard of the system. So, in other conditions, as in ordinary debility not associated with high temperature, the pulse is or ought to be rapid, and it would be the most mischievous treatment to attempt to lessen it except by removal of the condition of the skin upon which it depends. If this can not be effected, then it is clear that our duty is to sustain and not lessen the action of the heart. Somewhat rapid pulsation and free action of the skin may indicate health, but slow pulsation with excessive action of the skin must indicate disease, or tendency thereto. With regard to force of pulsation, that also depends very mainly upon the degree of action of the skin, for the force and volume of the pulse must be far more due to the resistance offered to the current of blood than to the *vis-a-tergo*. This resistance is no doubt found in all the vessels as they become smaller by subdivision, and especially in the capillary network, but that of the skin must, from its extent, control and balance that elsewhere. Hence, with a free action of the skin, the pulse is always soft, and can not be long otherwise, whilst when the pulse is unusually full and hard, the contrary condition exists—circumstances known well in practice, and especially in connection with the sequence of stages in fevers, but without a due appreciation of the mode of their production.

With these states of the heart's action and the circulation it is needless to occupy time in showing how greatly the processes of nutrition and secretion are dependent upon them; and with the disturbance in the distribution of blood to the centers and the superficies respectively, how liable we are to have deficient action within the body in one state, or that of too free action of the skin and of congestion and inflammation in the other.

As a general expression, we may be sure that, with an excessive action of the skin, there will soon be soft and feeble pulsation, lessened appetite, feeble digestion and assimilation, less activity of all the secreting and absorbing functions, (a state of inanition and anæmia), and constipation from innervation, followed by diarrhea, with excess of alkalinity of the blood, and low fever. The direct remedy is the improvement of the tone of the skin, as by cold salt and water bathing; and the indirect are alcohols, which, more than any other substance, sustain the heart and lessen the action of the skin; tonics, acids, and sufficient clothing, to lessen the waste of heat by evaporation. It is in such cases that flannel is of great service, notwithstanding the presumed influence of warm clothing in increasing perspiration, for in most cases it arrests the waste of heat, and temporary increase of perspiration only follows when the temperature of the body has again become too high.

It is through the skin that the changes of the seasons chiefly have their importance in inducing disease, since, at the periods of the year when the temperature and other meteorological conditions are variable, they produce an incessant variation in the action of the skin; variations which, in order to health, must be immediately followed by corresponding variations in all the internal actions of the body. The want of ready adaptation of the internal action to that of the skin is the ordinary source of disease and danger.

The only other function of the skin to which I wish to refer, viz., sensibility, has an essential connection with that just discussed; it is, in fact, to use a simile from mechanics, the regulator which controls the extent to which the valve shall be opened and the amount of steam which shall be employed. It will be evident, on reflection, that the sole use of this power is in reference to temperature, if we except the small amount and importance of the tactile sensibility. With this exception, there is nothing but temperature which is cognizable by our sensations in this great external envelop, and this is as important to life and health, in reference to heat regulation, as the sense of pain is in reference to the existence of important unseen disease or local injury. It is this which regulates, without our control, the sensation of heat, the rapidity of the circulation and transformation of food in reference to the production of heat, the appetite for food, the distribution of the blood whether to the center or the superficies, the amount of evaporation, and with our reason it regulates the clothing of the body, the degree of exposure of it to the atmosphere, and the amount and kind of exertion. Hence it is evident that this is at least one central point, if it be not the central point, from which all vital actions are regulated; and its importance is far greater than can be appreciated at a glance.

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Case of Recovery from Poisoning by Strychnia. By ALEXANDER SMITH, M. D., Edin., Surgeon of Her Majesty's 51st Light Infantry. Communicated by Professor CHRISTISON.

GEORGE PAYNE, æt. 39, a private in the 1st Battalion 60th Rifles, is an Englishman by birth, and previous to enlistment was by trade a laborer. He has been in the service for fourteen years, and of that period passed twelve years in India. Whilst in the tropics, he suffered at various times from dysentery and liver complaint. When stationed at Umballa, in 1850, he was attacked by ophthalmia, that disease having been at the time prevalent among the men of his corps; and from its effects he completely lost the power of vision of the right eye, and had that of the left somewhat impaired. He was invalided to England in 1857, and since his return home he has been able to do only light duty.

He is a largely made and very muscular man, of rather florid complexion, and with a heavy and discontented expression of countenance. His hair has been dark, but is now changing to grey, and that, together with the condition of his eyes, gives him the appearance of being considerably older than he really is. His general aspect, however, is that of a man in the enjoyment of robust health.

He was absent from Winchester Barracks on the night of the 5th June, 1858, and was not again heard of until a little past eight of the following morning, when he was brought on a stretcher to the military hospital, accompanied by a medical practitioner of the town, and suffering from the symptoms characteristic of poisoning by strychnia.

The following particulars have been ascertained of what took place previous to his admission into hospital:—

He spent the night of the 5th with a female, in a brothel in the lower part of the town of Winchester, and it appears that he drank a good deal, but without having been regularly intoxicated. About 7 A.M. of the 6th he asked for some water, stating that, as was his custom after he had been indulging, he wished "to take a powder."

He was supplied with a pint-jugful, which he drank off, having first mixed with it the contents of a blue paper parcel, the remains of which were afterwards identified as those of a 6d. packet of "Battle's Lincoln, vermin-killer." The whole of the contents of the jug were swallowed, with the exception of a very small quantity of the powder which had subsided to the bottom of the vessel.

His statement is, that he felt no unpleasant sensation whilst swallowing the poison, and did not experience anything unusual until about twenty minutes afterward, when he began to suffer from pain in the back, at a spot corresponding to the spine of the fifth dorsal vertebra, from which painful sensations, which he characterized as spasms, began suddenly to shoot, causing intensely painful convulsive jerkings of the muscles of the arms, legs, chest, and throat.

He was almost immediately afterward seized with a violent general tetanic spasm, in which he was seen by Sergeant Dodd of the Rifle Brigade, about twenty or twenty-five minutes after seven. He was then lying on the bed, in a state of opisthotonos, black in the face, and apparently dead, his respiration having for the moment been arrested by the violence of the fit.

The sergeant, with much presence of mind, mixed about an ounce of mustard in a quart jug of water, and, forcibly separating the teeth, succeeded in administering a large quantity of his thus promptly prepared emetic. Vomiting almost immediately followed, and the fluid first brought up was largely mixed with blood.

The discharges from the stomach were kept up by the administration of large quantities of hot water, and by repetitions of the mustard emetic, and would appear to have so effectually cleared that organ as to have rendered it unnecessary for the private medical practitioner, who was early in attendance, to resort to any further measures for that purpose. He, therefore, limited his treatment to the administration of forty drops of laudanum, which was not long retained; and he caused the man to be removed to the military hospital. He was brought there a little past 8 A.M., and was almost immediately afterward visited by the writer, who arrived in time to witness the occurrence of a fit similar to those which had already been endured. It was evidently brought on by an attempt to move him from the stretcher on to the bed, and was the fifth severe attack from which he had suffered since the commencement of his symptoms.

On feeling the approach of the fit, he uttered a suppressed cry of mingled pain and apprehension; his head was then thrown back, his jaws became locked, and his trunk bent backward. His forearms were violently flexed and pressed against the upper part of his chest. His legs were stretched out but not separated, his feet were arched, and his toes much contracted from the violent action of the muscles. His skin generally became much congested, and his face livid, whilst the eyeballs appeared to protrude, and the pupil of his best eye was dilated and fixed.

The rigidity of the trunk and limbs increased by a series of violent convulsive jerks, by each of which the body seemed to attain a greater degree of backward tension, until, for a few seconds, it became perfectly stiff, and the breathing, which from the commencement of the fit had consisted of violent efforts at inspiration, was arrested. This condition was speedily followed by complete relaxation of the muscles, the return of respiration, and a short interval of quiet, after which the convulsive jerkings again set in, and continued, as they had hitherto done, between the more severe attacks.

The following is a description of his state on being placed in bed about a quarter past 8 A.M.:—

He lay on his right side, with his head thrown forward toward the edge of the bed and resting on his right arm. His extremities were semiflexed, and the muscles of his neck, trunk, and limbs suffered from constant convulsive jerkings. His toes were somewhat cramped, but his extremities were warm. His face was slightly purple and bedewed with perspiration, and the skin of his whole body was much congested and emitted a peculiar odor.

His head was hot, and the pupil of his best eye remained dilated. His manner was nervous and hurried, and his countenance expressive of acute suffering. He appeared to be in constant dread of being touched, and most piteously begged that he might be left undisturbed. His apprehensions were but too well founded, as even the excitement caused by his bedclothes being re-arranged seemed to aggravate his symptoms. He moaned constantly, but was quite sensible, although, from his requiring an unusual length of time to consider his replies, it appeared as if his faculties were somewhat blunted. When he spoke, his words were uttered in an interrupted, jerking manner, owing to the spasmodic action of his muscles; and, from the same cause, the discharges from the stomach were shot out with much suddenness and great force.

The vomiting was almost constant, and was attended with intense thirst, and burning pain at the pit of the stomach.

His pulse was at first 132 in frequency, and small and feeble in character; but the writer could detect no intermission of its beats, although it was believed, by other observers, that such existed.

In the intervals of the violent spasmodic attacks, there was no regular "lock-jaw;" but the muscles of the jaws and neck participating in the general condition, frequently caused the teeth to close involuntarily, and with so much force, upon the tube of a stoneware feeding cup through which he was able to suck his drinks without changing the position chosen by himself, as to lead to apprehension that he might receive an injury by its being broken in his mouth.

He complained much of pain in the region of the fifth dorsal vertebra, over which he could not bear pressure to be made, and he stated that he felt the spasm shoot from that point into his limbs, and also round to the front of his chest, apparently in the region of the attachment of his diaphragm.

The following measures were adopted for his relief:—

A mustard plaster was applied along the course of his spine, from the nape of the neck to the sacrum; and the calf of each leg was also covered with a like application.

Twelve leeches were ordered for the pit of the stomach; but, as they could not be made to adhere, a large mustard plaster was applied instead.

The hair was cut as short as possible, and cold was applied to the head.

He was ordered an unlimited supply of iced milk and water, and to take frequently a strong infusion of coffee.

The iced milk was given almost constantly, during the first two hours of his treatment in hospital; but it was no sooner swallowed than it was rejected by the stomach, to be again almost immediately called for, so intense was the thirst, and so great the feeling of relief afforded by the cool beverage.

The slightest attempt to move any part of the body was productive of such agony, as to render it absolutely necessary, as far as possible, to protect him from such aggravation of his symptoms. A water-proof sheet was, therefore, drawn under his head and shoulders, and so arranged between the former and the edge of the bed, as to make a gutter by which the discharges produced by vomiting were conducted from his mouth to a tub placed close by,—an arrangement which made it unnecessary to subject him to the torture and fatigue of having his head frequently raised.

When the above treatment was commenced, the fluids first vomited were tinged with blood; but they soon ceased to be so discolored, and the liquids swallowed were then rejected, apparently unchanged.

In the course of about an hour, the violence of his symptoms had considerably abated; but about half-past 10 A.M., he had a sixth severe general tetanic spasm. From that time there were no more violent fits; and, within an hour afterward, or about three and a half hours from the time of his admission, the convulsive startings and vomiting had almost ceased, and he could bear, not however without much suffering, to be turned on his left side.

The pulse had then fallen to 80, and had become considerably stronger, both its diminution in frequency and gain in force having kept pace with the amelioration of the symptoms. The pupil of the left eye had also, by that time, returned to its normal condition.

Soon after admission, he felt a strong desire to make water, and made ineffectual efforts to do so. A gum-elastic catheter was therefore introduced, and a few ounces of highly colored urine were drawn off; and, although the muscular startings were at the time violent, the introduction of the instrument did not cause any aggravation of the symptoms.

At noon, a quarter of a grain of hydrochlorate of morphia was administered, and the same quantity was repeated every hour, until one grain had been given; and, in the evening, the bowels were well moved by a powerful purgative enema.

He passed a quiet night; but stated that, although free from suffering, he had slept but little.

In the morning, he was free from uneasiness at the epigastrium; but his tongue was much loaded with a white moist coating, and there was a good deal of thirst.

His pulse continued at 80 in frequency, and was of moderate strength; the headache had ceased; the face and skin generally had lost the livid and congested appearance which they presented on the previous day; and since about noon of the day before, there had been no starting of the muscles; neither had there been any return of the general tetanic spasms since half past 10 A. M. of that date. He still complained of pain over the spine, at the spot already named, where there was much tenderness on pressure. There was, however, no paralytic weakness of the limbs, or loss of the power of sensation in any part of the body.

He was able, without assistance, to pass his urine, which, though rather high colored, was moderate in quantity, and free from sediment.

Twelve leeches were applied over the spine, at the painful spot, which was afterward covered with a blister. The leeches acted effectually; but they all died soon after removal.

By the following day the pain of the back had much abated; and from that time his convalescence was steady, although somewhat retarded by ulceration of the skin of the calves of the legs, on which the mustard had been allowed to remain rather too long, no warning having been given of the severity of its action by the patient, by whom it probably had not at the time been felt. He also suffered much annoyance from the occurrence of several large boils on his back.

On the 13th July, he was discharged from hospital to perform light duty, having for more than a week quite regained his strength.

From various preparations, which it was afterward found that private Payne had made, it would appear that he had deliberately planned self destruction; but his motive for making so determined an attempt on his own life has not been discovered.

It has been ascertained that the packet of vermin poison used contained about three grains (3 grs.) of strychnia mixed with a small quantity of coloring matter; and, from careful inquiries, it is probable that the quantity swallowed amounted to no less than two and a half grains—sufficient, in all likelihood, to have proved speedily fatal, but for the timely aid afforded by the intelligent sergeant.

The above narrative is believed to be worthy of being placed on record; because so excellent an opportunity of watching the whole progress of a case of poisoning by strychnia in so large a dose, followed by recovery, does not often occur; and, should it present no feature which has not already been noticed in such cases, it may, nevertheless, be found of some value as testifying to the accuracy of previous observers.

AZIMGHUR, BENGAL, *4th August*, 1859. *Ibid.*

On Syphilitic Diseases of the Bones. By Dr. JOSEF HERMANN, Physician in the Department for Syphilis and Skin Diseases, in the Hospital Wieden. (Translated from the "Zeitschrift fur pract. Heilkundi," by T. L. A. GREVE, M. D.)

Under bone-syphilis, we comprise those morbid appearances on and in the bony system, which, according to general opinion, owe their cause, their nature, and their identity to syphilis. The nocturnal pain in the bones (dolor osteocopus), periostitis (with nodus, tophus and gumma), necrosis, caries and exostosis are the diseases, which, according to the prevalent system of syphilidologists, belong to general or constitutional syphilis, according to Ricord, in its tertiary form. If these diseases were always and exclusively the product of syphilis, and if this were fully proved, it would be fruitless labor to attack the ancient system; but as it is an undeniable fact, proved by the experience of all times, that there is also a periositit is, a necrosis, a caries, etc., which derive their origin not from syphilis, but from other actiological causes as from trauma, from the scrophulous, arthritic, and perhaps still other dyscrasiæ, the question seems to be justified, whether the diognosis of syphilitic bone-diseases is of such a character, that we can call it exact or consider it as the basis of a rational treatment? It is not sufficient in this connection, to consider merely the well known characters of periostitis, necrosis, or caries in general, but the question is: Have we a symptom, a pathognomonic sign by which syphilitic necrosis, caries, etc., is distinguishable from the non-syphilitic, so that the determination of the specific nature of the disease may be easy, difficult, or at all possible? In vain do we seek for indications in the works of the most celebrated syphildographists, for the diagnosis between syphilitic and non-syphilitic bone-disease. Bone-syphilis has, in fact, not a single objective characteristic symptom for its identity; it has even, as all authors acknowledge, entirely lost its character as syphilis; it never furnishes an inoculable secretion, and is not propagated as a hereditary disease. Neither microscopic nor chemical investigations have hitherto discovered a specific dyscrasia of the blood, exclusively peculiar to bone-syphilis. The alleged peculiarity, that bone-syphilis belongs to a later period of lues, and that it appears, as its last link, in from six to forty years after the primary affection, is sufficiently disproved by daily and sober observations at the bedside, where similar and even identical bone-diseases accompany, or rather complicate, the chancre already during the first days. Nor does the treatment of bone-syphilis furnish any indications to prove its specific nature; for mercury has here, according to the best authors on syphilis, not only lost its pretended specific power, but it is completely ineffectual, while iodide is indeed a specific. Even syphilization, which has of late been so highly recommended as a method of cure in syphilis, is, as Prof. Bœck, of Christiana, declares, nearly without effect in syphilitic bone-diseases, and only useful, to a certain extent, during the administration of iodide of potassium.

Pathological anatomy, it is true, describes in graphic language, the syphilitic bone-ulcer; it speaks of a syphilitic sequestrum; mentions as the most striking appearance on the syphilitic bone, hyperostosis, and especially the condensation (sclerosis) of its tissue, and gives a diagnosis between syphilitic, scrophulous, arthritic and carcinomatous bone-diseases; but, to get to the bottom of the question, we must ask: How does pathological anatomy arrive at the diagnosis of bone-syphilis? Is the immediate basis of the diagnosis in the object itself, or did it derive its first knowledge from the clinical conception of bone-syphilis? The answer is not difficult. Pathological anatomy could originally recognize only those products in the bone as bone-syphilis, which clinical experience had taught it as such, unless it pronounces a bone-disease syphilis merely because some remnants or traces of former syphilis are yet visible. This latter case, we can not suppose with so exact and positive a science, as pathological anatomy is; and the fact that it declares certain diseases of the bones syphilis, is, therefore, only a proof that an erroneous clinical diagnosis has originally introduced the deplorable error into exact science, and has retained it there up to the present time. We arrive at the same conclusion, when we ask: Why has pathological anatomy, which, as Roketansky, Virchow, and others, teach, finds mercury in bones, and which admits mercurial bone-diseases, not yet indicated the diagnosis between syphilitic and mercurial bone-diseases; and, why does it hesitate to refer even arthritic bone-affections, which, as is well known, are so similar to those of a syphilitic, or rather mercurial character, to arthritic dyscrasia; and why does it openly acknowledge that the cause of these affections is yet unknown?

If it is evident from the above, that we have no reliable basis for the diagnosis of bone-syphilis, we must involuntarily ask—how, then, originally the first clinical diagnosis of bone-syphilis was made? There can be no doubt, that the first diagnosis of this kind was the same as to-day; its only basis is the pre or co-existence of a primary syphilitic affection.

Under such circumstances, it would hardly seem necessary to point out the uncertainty and the insufficiency of such a procedure in diagnosis; for there is, in my opinion, no greater scientific error, and also no greater wrong, no graver offense against all humane feelings, than to declare a disease, the aetiological nature of which is not known, syphilis, merely because a primary affection preceded it, or because an efflorescence of the skin, whose specific nature and identity nobody could with certainty determine, is presumed to be the connecting link in the chain of symptoms. This error appears in the most glaring colors; as, at present, previous or yet existing syphilis is diagnosticated with the greatest ease. What I now say, is not imagination or fiction; it is truth, based partly on statements in the works of syphilidologists and partly on daily experience in the treatment of syphilis.

If a patient is afflicted with one of the above named bone-diseases, the proximate cause of which is not clearly evident, it is not the object of investigation to inquire impartially into the casual connection of the bone-disease with syphilis, but according to the supreme principle, that syphilis must here either pre or co-exist, to diagnosticate syphilis at all hazards. The latter is extremely easy. If the patient admits that he at any time suffered from syphilis, then all further examination is superfluous; if he does not admit the fact, he must, as Simon advises, be brought to a confession by skillful questioning; should this also fail, the syphilidologist will find no difficulty in arriving at the desired point, from objective appearances. Any pigment spots, pretendidly the remains of former syphilis, a scar on or near the genitals; or, in the absence of these, the swelling of a gland on the neck or arm, however slight, make the diagnosis irrefutable. If none of these symptoms are present, then concealed chancre in the urethra appears on the stage, which, by its chameleon nature, is ready to play any character that may be allotted to it, whether the cicatrice is discoverable or not; and, finally, in what cases does not hereditary syphilis come to the rescue, if necessary? We can not wonder, then, when most authors call the diagnosis of bone-syphilis an easy one—as, for instance, Vidal de Cassis, Simon, and others. Ricord, who is always ingenious, even in self-delusion, says, that in certain cases, the diagnosis of bone-syphilis becomes very difficult, often even impossible; but, when he comes to diagnose syphilitic caries from that produced by mercury, which he, as a rational physician, admits, he says: "How different is syphilitic caries from mercurial!" The details of the how, Ricord forgot to give, or he presupposed the knowledge of it; it is, at any rate, to be regretted that he withheld his experience on this point.

If, now, it must be admitted from the above, that the diagnosis of syphilis of the bones is very indefinite, defective and uncertain; that it is without any rational foundation; that, further, the present basis of diagnosis, the pre or co-existence of syphilis, is very loose, so that we are without means by which the syphilitic nature of bone-affections can be fully proved, we will certainly be permitted to entertain just doubts respecting the ætiology of these diseases, and to institute scientific investigations in this direction. I am far from having any desire to trace all bone-diseases back to the same origin, for I am convinced that nature makes use of manifold causes for various effects; but I shall endeavor to prove, firstly, by a retrospect into the history of syphilis, and, secondly, by observations at the bed-side and otherwise, that these bone-diseases, called syphilitic, belong, for the most part, to hydrargyrosis.

The history of syphilis, in general, is probably as old as the disease; the disease as old as the human race; the history of syphilis in bones, however, dates, according to Astley Cooper, from the second period of his division, from the year 1516-1526. Oxostosis is first mentioned at that time. The English writer, William Beckett, who wrote in 1713, cites, according to the same author, Theodorich, Franciscan monk, and afterward Bishop of Cerria, who wrote in the 12th century, and was the first to introduce mercurial preparations as medicines. From these two data, it is evident that mercury was used before the so-called bone syphilis was known.

Dr. Fergusson, who participated in the wars in Spain, in speaking of the great mutilation of the British soldiers by primary syphilitic ulcers, remarks: The venereal ulcer not only yielded much less to the effects of mercury than at home, but the organism was, even while under the full influence of the remedy, attacked by secondary symptoms to a disproportionate extent. The same Fergusson says further, that the Portuguese, who communicated the disease to the English soldiers, had it only in the mildest form, against which they never used mercury.

But to approach nearer to our own time, we must all acknowledge that 30, or even 20 years ago, the lues gonorrhoica played a most prominent part; caries and necrosis following gonorrhea, were considered the severest forms, resisting treatment longer than those belonging to syphilis, and this was taught in the colleges. What remains to-day of lues gonorrhoica and bone diseases, following gonorrhea? Nothing but the remembrance, and the occasional appearance of gonorrheal arthritis, or, more correctly, of arthritis, occurring accidentally with or after gonorrhea. I do not believe that gonorrhea has of late lost the prerogative in the production of the severest bone-diseases, but I believe that it never had that power, and that these affections have disappeared from existence and reality, in consequence of the generally adopted treatment of gonorrhea without mercury, while formerly mercury alone produced them.

The opinions of the best physicians of the present day coincide with this historical undeniable fact. At the time of the convention of natural philosophers at Vienna, in 1856, one of the most celebrated professors of a university in northern Germany informed me, that he treated in Danzig, during 12 years, nearly 4,000 cases of syphilis without mercury, and that at that time bone diseases hardly ever occurred, and one of the teachers of our high school told me several times, that 20 years ago, when in the general hospital of Vienna, syphilis was treated without mercury, bone-affections were seldom observed in the pathologico-anatomical laboratory, while this was not unfrequently the case before and after that time.

If we attentively follow these observations, in connection with the above proved insufficiency of the diagnosis of bone-diseases, and if we take into consideration the circumstance, that the whole series of the so-called syphilitic bone-diseases indubitably occur in quicksilver laborers, who never had syphilis, as I have shown in my article—"Studies on diseases in Idria"—we must come to the alternative, that either there is a bone syphilis, (but we have no positive proof for its existence, as it is in every respect similar to diseases of bones produced by mercury), or that bone syphilis does not exist at all, and the diseases generally considered as such are nothing but chronic hydrargyrosis.

The first part of the alternative does homage yet to a more philosophical view of the disease, and forms the last nourishment as it were, of a hereditary or acquired prejudice; the second part is the practical view, belonging to the exact investigation of the present time, which is based on clinical observation of the natural course of pure syphilis on one side, and on pathologico-chemical analysis on the other.

Before proceeding to my observations at the bedside, I will exempt myself from the imputation, that I consider every species of caries as a mercurial disease. I am fully convinced that the chancre poison, when transferred to a periosteum, may produce inflammation, and perhaps also necrosis and caries, and while I add, that also trauma, scrophulosis and perhaps other dyscrasias, may induce such affections, I only pronounce those bone diseases chronic hydrargyrosis, which have hitherto been designated as tertiary syphilis, originating from a syphilitic dyscrasia, that may often be latent, as it is asserted, for more than 40 years.

The result of observations made on this subject in the department for syphilis, in the hospital Wieden, during the last six months, is as follows:

1. Diseases hitherto considered bone syphilis, and especially dolor osteocopus, periostitis, typhus, gumma and exostosis occur in individuals, who either have had syphilis or have it yet, and in the latter case not only when the primary form is already healed, so that only cicatrices or an exanthem constitute the connecting link, but also in patients, who still suffer from primary syphilis, and where no connecting link exists.

2. These diseases occur in persons who have been treated with mercury for syphilis, but also in those who have taken mercury against other diseases, but never against syphilis.

3. The same diseases occur independently in individuals who never had syphilis, and never took mercury in any other disease, but who have either used Ung. hydrarg. ciner. against morpiones, or have been exposed to the effects of the metal in their occupations as painters, hatters, guilders, barometer-makers, or in some other business, in which mercury is used.

4. These diseases are complicated with a more or less distinct cachectic condition of the whole organism.

5. All these affections can be cured by the use of iodide of potassium, which may be called a specific in these bone-diseases; provided, that no incurable destruction of internal organs, or a change of periostitis into exostosis, has taken place.

6. During the treatment of these cases with iodide of potassium—which I call an anti-mercurial—chemical analysis revealed mercury in the urine, in the sputum, in the blood, and, in one case, which ended in death, and which I will communicate, also in the internal organs.

To substantiate the above statements, I will report four cases:—

Case 1.—H. C., aged 33 years, formerly a soldier, was received in the department for syphilis, on October 9th, 1858.

Psoriasis over the whole body, reddening and swelling of the mucous membrane of the throat, a grey exudation, with partial ulceration at both tonsils, swelling of the cervical glands, cicatrices on the glans penis, at night excruciating pain in the hollow bones of the lower extremities, great tenderness at the occipital bone, increased by the slightest pressure, with swelling of the periosteum, general emaciation and debility, dry and sallow skin. These are the symptoms that have existed for four or five weeks. The patient had chancres in 1852, 1856, and in April, 1858; the first of which, treated with mercury, lasted for four months; the second, without mercury, for fourteen days; the third, in a hospital of this city, under mercurial treatment, for three months. Between the last cure and the present disease, three months elapsed; during the interval, the patient suffered, however, constantly from general debility, and he had no firmness in walking.

The simultaneous presence of an exanthem, of ulceration in the bone, of periostitis, and of dolor osteocopus, furnish, according to the present system, a well-marked case of so-called secondary and tertiary syphilis. The psoriasis is, however, in my opinion, either not specific, and merely an accidental complication, or, it originated during the existence of the chancre as a specific exanthem, which (as psoriasis sometimes does), periodically disappears, and which has now returned on the basis of the mercurial discrasia. All the other symptoms belong, doubtless, to chronic hydrargyrosis.

The treatment was as follows: The patient took, daily, 10 grains of iodide of potassium, which, as an exception, I increased to 40 grains; dissolved in three ounces distilled water, one half at seven, the other at 8 o'clock, A.M. Applications of ice were made to the occiput, and when these could not be endured, chloroform with oleum amygdal. dulc., and afterward, also, tinctura iodini were applied with friction. For sixteen days, the patient was daily washed with cold water, and, during the latter part of the treatment, warm baths were used. An animal diet was adhered to, and, toward the end, wine was exhibited. The pathologico-chemical analysis of the urine clearly indicated on Oct. 18th, consequently, after iodide of potassium had been used for nine days, the presence of mercury; the same result was obtained by electrolysis on Nov. 2d; the third analysis, on Nov. 8th, and the fourth, on Dec. 8th, showed yet traces of the metal; until, finally, the fifth investigation of the urine, on Dec. 21st, evinced no mercury.

Chemical analysis proved the correctness of the diagnosis of mercurialism, and the result of the treatment was, considering the severity of the case, very favorable. On the twelfth day of the treatment, the nocturnal pain in the bones abated, and, after twenty-two days, it disappeared completely, together with the sleeplessness. After forty-seven days, the general health was improved; of the exanthem, nothing but the pigment could be seen; the ulcers in the throat were healed. The patient remained in the hospital until Jan. 3, 1859, for the purpose of observation, and left it, after two months and twenty-four days, completely restored.

[Limitation of space prevents me from giving the other three cases, reported by Dr. Hermann. They are similar to the first, and tend to prove the correctness of the writer's views.—G.]

On the Radical Cure of Reducible Inguinal Hernia. (From the Nashville Record.)

The radical cure of inguinal and scrotal hernia, long regarded as almost hopeless, is now reduced to a fixed fact, and is numbered among the most successful labors of the surgeon. The profession is indebted to the labors and ingenuity of Professor Wurtzer, of Bonn, for the suggestion and perfection of this operation. 'Tis strange that he could have practiced it for twenty years, and the profession of England and France should have remained in ignorance of it until 1854: it was in the earlier part of the same year that it was introduced into the United States.

The first operation performed in the south-west was by Professor May, in Nashville, last November, before the class of Shelby Medical College. Since that time it has been frequently performed by Prof. May, Dr. Newnan, and myself, with satisfactory success.

I first used Wurtzer's instrument; the objection to it is the inability in all cases to adapt the cylinder to the size of the abdominal openings and the inguinal canal. The Rothman instrument is a modification of Wurtzer's, but possesses the advantage of sliding pieces, by means of which it can be adapted to all cases, making it decidedly preferable. The objection of papers is obviated by having it made of hard rubber, such as is now constructed by Tiemann & Co., of New York. The manner of performing the operation is simply to invaginate before the finger of the left hand a portion of the scrotum, through the external abdominal ring, and along the inguinal canal as high as the internal ring; then, having well oiled the cylinder of the instrument, take it in the right hand, and gradually introduce it behind the finger while it is being withdrawn. Be sure the instrument has entered the canal, and is well pushed up to the internal ring; then the needle is passed through the cylinder and out through the aponeurosis of the external oblique muscle and common integument. The clamp is now applied with pretty firm compression. The point of the needle and its handle are removed, and small metallic balls substituted in their place. The scrotum is prevented from dragging upon the instrument by a scrotal supporter. The operation is now completed, and the patient permitted to remain all this while in the recumbent position, with the head a little elevated, and the thighs flexed upon the abdomen, which is the position for the operation; and even for a week after the instrument has been removed, a spica bandage and compress being kept applied. When the patient gets up he should wear a light truss, well applied, and do only light work for several months, when the cure may be relied upon as radical. I can not insist too positively upon the necessity of wearing a truss for several months. The only case of failure which has come under my observation has resulted from negligence in this particular. It is easily understood how the adhesions of the plug, while yet tender, may be broken up unless they have some artificial support, but after they have had time to become firm, it is easier to force a rupture upon the other side than to have a recurrence of this. T. L. M.

On the Treatment of Acute Rheumatism by Citrate of Potash. By John W. Lodge, M. D., Interne of Philadelphia Hospital.

It must be admitted that in the present state of our knowledge, we know comparatively little of the pathology of that very painful and sometimes dangerous disease, Acute Rheumatism. Various complex, and often directly antagonistic theories, have been offered by different observers. The idea that the disease is but an ordinary inflammation, is not without supporters. Some, again, are content with affirming that there is a peculiar predisposition lurking in the system which only requires some exciting cause for its manifestation. Regarding the nature of this rheumatic diathesis, we are not informed, except by comparatively few pathologists. Prout and his followers, believing in the abnormal existence of some acid in the circulatory system, have declared it to be the lactic; whilst others, with, perhaps, equal reasons for the conclusion, have supposed it to be uric acid.

That rheumatic is very different from ordinary inflammation, is evidenced by the phenomena which attend it. Common inflammation developed in a large joint, the knee for instance, is a local disease of long and tedious course, never suddenly leaving the original site, and appearing in the ankle or opposite knee joint. Again, in rheumatism, the natural hue of the tissues is but slightly changed, whilst all are familiar with the intense and lasting redness which accompanies other kinds of severe inflammation. These facts, together with the absence of suppurative termination, must convince us, whatever the real pathology may be, that it is entirely different from sudden and acute attacks of ordinary inflammation. Whilst the pathologist has been busy with his investigations concerning the *materies morbi*, the therapeutist has not been idle regarding the modes of treatment; and it is the object of the following cases to add a mite of testimony in favor of a plan which promises to be more successful than any other. I allude to the saline, and these cases are produced in support of its efficacy:—

PETER MURPHY, aged 63 years, of intemperate habits, was admitted into the Philadelphia Hospital, April 25, 1859, suffering with acute rheumatism. He had been living for some time in a malarious district in the lower portion of the city. The disease, which commenced about one week previous to his admission, had affected the larger joints of the superior and inferior extremities. The pain in these parts was intense, the slightest movement causing almost unbearable agony; pulse frequent, skin hot and dry. The heart was carefully examined without detecting any abnormal sound. The patient complaining of having passed several sleepless nights since the attack, he was ordered 10 grs. of Dover's powder, and sent to bed. On the following morning, Dr. J. Aiken Meigs, one of the consulting physicians of the hospital, was requested to see him. The patient was ordered drachm doses of the citrate of potassa, to be taken four times daily, largely diluted with water. On the third day after the commencement of the medicine, the pain in the affected joints had subsided, the skin became moist, the patient being in every respect improved. He continued improving rapidly and permanently, and on the eighth day after his admission, requested his discharge. In this case no cardiac symptom was developed.

WM. LESHER, aged 31 years, entered the medical ward on the 2d of May. On the 7th, I was requested by my colleague, Dr. Bragg, to visit him. Nearly the whole of the external surface was affected, and a feeble friction murmur heard over the base of the heart. From the time of his entrance until the 7th, he had been under the ordinary treatment without improvement. Acting upon the success of Dr. Meigs' prescription in the preceding case, we ordered him the salt with the same directions. The result in this case fully confirmed our opinion regarding the first. The rapid diminution of pain in this case was surprising. The cardiac and other symptoms gradually subsided. This patient was discharged, cured, on the 16th.

JAMES MCCREARY, aged 44 years, admitted on the 20th of May; the disease confined principally to the joints of the superior extremity, the parts considerably swelled and painful, skin hot, and the pulse about 105. He was jaundiced, but there was no cardiac complication. By the same remedy this man recovered, and was discharged on the 30th, ten days after his admission.

Since the notes of the above cases were taken, Dr. Wm. Thomson, of Lower Merion, informs me that he has been very successful with this treatment, preferring the tartrate of soda and potassa.—*Med. and Surg. Reporter.*

PART THIRD.

CLINICAL REPORTS.

Newton's Clinical Institute.—Winter Session of 1858-'9. Services of Profs. NEWTON and FREEMAN.

REPORTED BY JAS. A. HENSHALL.

CASE 603.—JOHN MCGINNIS, aged 19. *Dyspepsia.* Has been affected several months, and symptoms becoming more aggravated every day. He has a good appetite, but food causes great distress of stomach; tongue slightly coated; bowels constipated; complains also of a pain in the chest, with considerable cough, and free expectoration; he has a constant pain in the gastric region, which is increased after eating; liver torpid.

Treatment.—℞ Iodine, grs. viij.
Alc. Ext. Nux. Vom., grs. ij.
Ext. Belladonna, grs. viij.
Macrotin, grs. xv. M.

Make pills, No. xx. Take one pill three times a day.

℞ Tinc. Capsicum,
Ol. Terebinth, *aa.* ℥. M.

Apply, with friction, over the stomach, several times a day.

March 4.—Improving; tongue clean and healthy; still has the pain in the stomach after eating, though not so severe. Continue the iodine pill.

R. Tinc. Capsicum,
Ol. Terebinth, *aa.* ℥ j.
Ol. Tiglii, ℥ ss. M.

Apply to stomach, as before. Take a Comp. Cath. pill every night.

March 11.—Still improving; can now eat a moderate meal with some degree of comfort; cough much relieved. Continue treatment.

No further report.

CASE 604.—Feb. 18. DANIEL HIGGINS, aged 4 years. *Chronic Bronchitis.* Has a constant hacking cough, and expectorates sputa of an opaque and ropy character; experiences considerable dyspnœa; the fauces, pharynx and tonsils somewhat inflamed, with a thickened and inflamed condition of the bronchial tubes; considerable irritation of the stomach, with occasional vomiting after eating; much troubled with incontinence of urine, having no control whatever of the urinary apparatus; pulse 110.

Treatment.—℞. Syr. Rhei et Potas. Comp. ℥iij.
Syr. Helianthi Comp. ℥ij.
Tinc. Aconiti, ʒj. M.

Take a teaspoonful every hour.

℞. Tinc. Capsici, Aqua Ammonia, Alcohol, *aa* ℥ j.
Ol. Terebinth, ℥ ss.

Apply to spine, with brisk friction, at night.

Feb. 22.—Seems somewhat better, breathes easier, and not so much irritation of stomach. Continue treatment.

Feb. 25.—Cough much relieved; improving rapidly; breathing almost natural; pulse 90; has perfect control of the urinary function. Continue treatment. Last appearance.

CASE 605.—Feb. 25. JOHN BRADLEY, aged 9. *Tinea Capitis.* This patient was before the Clinic about a year ago, suffering with Prolapsus Ani, of which he was cured; he now appears affected with Tinea Capitis, or Scald-Head; he has been the subject of this disease for four weeks; it occupies the superior and posterior parts of the scalp; small ulcers have appeared in different spots, which, on some days, are perfectly dry, and at other times attended with a considerable secretion.

Treatment.—℞. Oxalic Acid, ʒ j.
Aqua Ferv., ℥ iv.
Glycerine, ℥ ij. M.

After having shaved the head closely, and washed with Castile soap and water, apply the above, night and morning; about half an hour after each application, apply mild zinc oint.

March 8.—Improving rapidly; scarcely any appearance of the disease. Continue treatment.

March 15.—Discharged, cured.

Case 606.—March 4. Bridget Shay, aged 3. *Pneumonia.* Has a continual cough, with difficulty of breathing, and profuse expectoration of a rusty appearance; complains of headache, and pain in the chest; considerable febrile excitement; pulse full and frequent; tongue very red about the edges; the left lung transmits a crepitant rhoncus; the symptoms are steadily increasing, and becoming of an aggravated character.

Treatment.—℞. Con. Tinc. Verat. Vir., gtts. xx.
Con. Tinc. Gelseminum, gtts. xxx.
Syr. Senega, ʒ ij. M.

Take a teaspoonful every three hours.

March 25.—Entirely recovered. She now appears with the usual symptoms which indicate the existence of Ascaris Vermicularis.

Treatment.—℞. Santonin, grs. xxx.
Podophyllin, grs. j.
Hydrastin, grs. x,
Sacch. Lactis, grs. xx.

Triturate well and make xv powders. Take one, three times a day.

April 8.—Discharged, cured.

Case 607.—March 4. Matthew Tinarry, aged 40. *Hypertrophy of the Heart.* Has been affected about a year, has a slight cough, and expectorates small quantities of tough and blackish sputa; experiences great pain, upon pressure, about the last cervical vertebra; there is a constriction of the œsophagus, upon attempting to swallow; and has considerable pain and soreness over the entire chest; there is evidently a thickening of the left venticle of the heart, causing an irregular action of this organ; pulse slow, strong and vibrating; bowels constipation. This patient has been treated by a number of physicians, but with no perceptible benefit.

Treatment.—℞. Aqua Ammonia, ℥j.
Ol. Cajeputi, ʒss.
Alcohol, ℥viij.
Vol. Liniment, ℥iij. M.

With this, rub the entire spinal column, night and morning.

℞. Comp. Syr. Helianthi.

Take a teaspoonful, three times a day.

℞. Podophyllin, grs. v.
Jalapin, grs. x.
Leptandrin, grs. xv.
Ext. Taraxacum, q. s. M.

Make pills, No. x. Take two at night, until they operate briskly.

March 8.—Breathes easier, and not so much soreness of the chest; cough much better. Continue treatment.

March 22.—About the same; but says he is in better spirits; cough disappeared.

℞. Con. Tinc. Gelseminum, ʒj.
Syr. Zinziber, ℥ij. M.

Take a teaspoonful, every four hours. Continue liniment.

March 29.—Action of the heart seems to be more regular; does not experience any pain or soreness in the chest; appetite good; bowels regular. Continue treatment.

April 8.—Improving slowly; feels better now than he has for a year. Continue treatment. No further report.

CASE 608.—March 8. PATRICK KENALLY, aged 32. *Chronic Follicular Pharyngitis.* Has been affected about six months, previous to which was perfectly healthy; pharynx and fauces much reddened and irritated, with tenacious secretion; uvula slightly elongated; considerable cough, and at times very hoarse; tongue somewhat coated; bowels inclined to constipation; urine scanty and high colored; complains of occasional pains in chest and forehead, and a sense of constriction of the throat.

Treatment.—℞. Zinci Sulph. grs. v.
Plumbi Acetas, Hydrastin, *aa* grs. iij.
Tinc. Opii ʒj.
Aqua, ℥iv. M.

Gargle the throat with a teaspoonful, three times a day.

℞. Syr. Stillingia Comp. ℥ vj.
Iod. Potas., ʒ j. M.

Take a teaspoonful, three times a day.

March 22.—Cough better; throat not so sore, but still some irritation of the fauces.

℞. Syr. Stillia Comp. ℥ ij.
Tinc. Phytolacca, Tinc. Iris Vers., *aa* ʒ j. M.

Take a teaspoonful, three times a day. Continue gargle.

March 29.—Decided improvement; uvula and adjacent parts more normal in appearance; soreness in chest, and cough, nearly disappeared; yesterday, applied a solution of nitrate of silver, with a probang, to fauces and pharynx; slight constipation.

℞. Pulv. Lobelia, grs. xxx.
Trisnitrate of Bismuth, grs. xxv.
Ext. Butternut, q. s. M.

Make pills, No. xxx. Take one pill, three times a day. Last appearance.

CASE 609.—March 15. JOHN NEWMAN, aged 28. *Ulcer of Leg.* A dark, foul ulcer occupies the middle of the shin, accompanied with an intolerable itching; the parts surrounding the ulcer are much swollen and discolored; the patient is exceedingly nervous, and of a dissipated habit.

Treatment.—℞. Oxalic Acid, grs. xxx.
Morphia Acetas, grs. x.
Aqua Bul. ℥ iv.
Glycerine, ℥ j. M.

Apply to ulcer night and morning, followed by mild Zinc. Oint.

March 18.—Ulcer has assumed a healthy appearance, and the itching has entirely ceased. Continue treatment.

April 5.—Discharged, cured.

PART FOURTH.

EDITORIAL.

To our Cotemporary of the Lancet and Observer.

We do not know you personally, Mr. Editor, and have but a short editorial acquaintance. Permit us, however, to call your attention to two *facts*.

In the February issue of your Journal for '59, you made a miserably dirty attack upon the Eclectic Medical Institute of this city. In that chaste, dignified and gentlemanly production, you use the following language:—"It (the Institute) once had a fellow in it by the name of Saunders, who had the impudence to edit Gregory's chemistry. *O, tempora! O, mores!*" We presume you are aware that this same *impudent fellow* has made a *luminous* discovery, which is to give *light* even to *you*—the great expounder of the doctrines of Æsculapius, and the bell-weather of the western medical fraternity. It is evident from all you write, say and do, that you hate Eclectics, consider them ignorant, unscrupulous pretenders, and if you were able, would hang and damn us all. Now, Mr. Editor, how do you relish fact *first*, that this same Prof. J. Milton Saunders, this same impudent fellow, has, by the discovery of his water-gas, proved that there is at least one scientific, intelligent Eclectic? How do you enjoy the prospect that you, so deeply versed in the mysteries of science, that you, who have "crossed the water" and scratched your back against the walls of one of Victoria's Hospitals, are to be en*lightened* by a vile quack? That soon, water-gas will be used in all the principal cities, and then these very streets which you perambulate will be illuminated by eclectic light, that you must read, eat and retire by eclectic light, that by eclectic light you must write your chaste and truthful editorials against us, and that on all sides you must see and be lighted by the brilliant flashes of eclectic genius? We pity you, and hope you will not be induced to abjure gas altogether, and return to coal oil and candles.

Secondly, Mr. Editor, we wish you to remember, when you are hurling your billingsgate and foul abuses against us, that once, when a student of medicine, you were the subject of a grievous malady, that you applied in vain to the celebrities of this city for relief, that *science* itself failed, and when there was "no arm to save" among the regulars, and visions of cork legs and crutches floated thick and fast through your fancy, then you applied for succor, *mirabile dictu!* to a miserable quack, a vile Eclectic. Nor did you appeal in vain. That leg was saved, and you honorably acknowledged the obligation by footing the bill years afterward. We do not write this to excite your *irish*, but simply to admonish you that as much as you denounce, you are deeply indebted to Eclectics. You should abandon old fogy notions, and not abuse those who can give you light, and save your leg. We are progressive, you anti-progressive. We are searching for new principles of practice, while you continue in the chrysalis state, are a fossil remain, strongly perfumed with the odors of antiquity.

We leave you to your conscience. When by eclectic light, you contemplate a leg *eclectically preserved*, be just, and "swear not at all." We refer you to a liberal gentleman's views upon water-gas, under the head of "abstracts and clippings," of this number.

THE SCALPEL.

The Scalpel, we have been receiving regularly. Dr. E. H. Dixon is a man of undaunted moral courage. We like him because he has the courage to stand up in the midst of a corrupt system of monopoly and vice, and boldly denounce them. Though we differ on many questions very materially from Dr. Dixon, we must award to him that meed of praise which we think, as an honest man, he deserves. Single-handed, he has combatted the united and talented opposition of the profession for many years, flaying the scoria from the extra dignified gentlemen who thought their abilities beyond reproach, and demonstrating to the public that some men knew something as well as some others, and that all the learning was not confined to the walls of the academy.

Dr. Dixon has dissected the profession so thoroughly with his *Scalpel*, that the remaining skeleton is slightly fetid; and no matter what may be said against him, or the style in which he uses his dissecting blade, we think his journal calculated to effect much good. He is the right man to edit such a periodical, and he is in the right place to commence the reform. We hope the *Scalpel* will get a wide circulation, and that its editor will be amply remunerated for his labors. Let every body send a dollar to Ed. H. Dixon, M. D., New York, and get the *Scalpel*, which is *the* journal for the people.

INTERMARRIAGE OF COUSINS.

The Assessor's returns of Huron county, Va., show 11 blind, 12 deaf and dumb, 12 insane, and 12 idiotic persons in the county. The parents of five of these were by relation cousins before marriage. Three of the five (two blind and one idiotic) were so afflicted from birth, and one (idiotic) from infancy. The fifth was deaf and dumb for a time not ascertained, probably from birth. It is probable that the number of parents so related to each other is larger, as there was no information obtained as to part of them.

This is a subject of general discussion at the present time by many of the legislative bars, especially Kentucky. No doubt a law should be passed in all the states, positively prohibiting such intermarrying. While a few cases may not appear to be affected, such is not true of the great mass. We know of an instance where six children of one family, whose parents were cousins, were successively attacked about the age of fourteen with amaurosis, and each one became perfectly blind.

Prof. W. Byrd Powell has treated fully of this subject in his late work on the Human Temperaments.

ECLECTIC PHYSICIANS.

Every week we receive letters asking us to send them Eclectic physicians. We beg to say, that the demand is greater than the supply. We are doing all we can to build up a liberal medical profession, and are sending out yearly large numbers of well qualified physicians, whom we recommend to settle in localities where these wants exist. All that we could supply has been done promptly, and it affords us great satisfaction to know that the public has learned to appreciate rational medicine. The people are essentially eclectic; they have been drugged with mercury, puked with tartar emetic, and bled to their heart's content, and they have learned the evils of such a practice.

In no instance do we know of persons employing Eclectic physicians, ever leaving that system and returning to the flesh pots of Egypt. The system is at this time spreading as rapidly as at any time since its inception.

THE ALLOPATHIC MIRROR.

The Results of their own Practice as stated in their own Journals.—We will venture the opinion that no class of medical men ever heard of any school or pretenders which could produce a stronger reflection of a bad practice. Even the late statistics which have been obtained, as the result of leaving the same class of diseases to nature alone, show a much better result. And if we can place any reliance upon the history of those who have attempted to give the true statement of the proportional fatality of disease, when everything is left to nature, the percentage of mortality does not begin to compare with the results of the practice of medicine and surgery in one of the greatest and most liberallyendowed Allopathic institu-ions in the world, St. George's Hospital, London. In the Reports of this institution, we find the following results, and certainly we have the right to suppose it correct:—

In examining the St. George's Hospital Reports, we find the evidence of what we have already asserted to be true, viz: the percentage of mortality is much greater in Allopathic than in Eclectic practice. We have space for only a few illustrations. It appears that the percentage mortality of 188 fever patients was 9,04, a proportion of which any Eclectic would be totally ashamed, and who would not ask a practice with the exhibition of such a want of knowledge of disease; and if he did seek a practice, when he had been so unsuccessful, he would hardly obtain it. The loss in scarlatina was 8,69 per cent. of all the cases treated. Can any one show such a fearful mortality in Eclectic practice? Such results would disgrace our practitioners. The mortality in anasarca was 34 per cent., and in ascites 57 per cent. Surely, this is a terrible mortality, and might well cause the British people to pause and inquire if the profession understood the pathology of dropsy. In hæmoptysis the loss was 22 per cent.; in cachemia, 33 per cent.; and in scrofula, 37 per cent. We unhesitatingly call these disgraceful proportions or percentages. In tubercular disease the mortality was 22 per cent.; in hydatids, 33; in encephaloid growths, 91 per cent. This is worse, by far, than the Allopathic practice in America, and here it is bad enough for all purposes. Of schirrus tumors the mortality was 33 per cent. Of delirium tremens the mortality was 22 per cent. Our drunkards would soon be thinned out, if such results attended American practice. In tetanus the mortality was 100 per cent.; in apoplexy, 42; in spinal inflammation, 33 per cent.; in pericarditis, 43 per cent.; in hypertrophy of the heart, 44 per cent.; in phlebitis, 80 per cent.; in laryngititis, 63 per cent.; in pneumonia, 25; and in pleurisy, 39 per cent. Only think of a system of medicine in which more than one third of the cases of pleurisy are lost. This is a sad sequel to bleeding and calomel. The loss in quinsy was 10 per cent., and the same in ulcerated tonsils; in mumps, 33 per cent. This is a shameful result, and we must believe that the cases were more or less complicated. In diarrhea the loss was over 8 per cent., and in dysentery, 60 per cent. Now, any Eclectic who would lose more than 1 per cent. of dysentery cases, would be denounced as an incompetent practitioner. In peritonitis, the mortality was 53 per cent. of the acute, and 33 of chronic. Of enlargement of the liver, the mortality was 88 per cent.

Now can any reasonable man examine these results, and not feel that the system which fails to effect more cures than is here indicated, is miserably deficient in some respect? Were it possible to collect the statistics of both Allopathic and Eclectic private practice, we should have no difficulty in demonstrating the value of the two systems. Our agents act promptly, and as we desire to have them act. The allopathist, who sees the same indications, fails to fill them, with his uncertain drugs. Nothing but prejudice prevents the profession at large from using all our remedies as we use them, and, in fact, a few are already so employing them.

The physician who practices from right motives should never suffer his judgment to be warped by the misrepresentations of the ignorant and bigoted.

We are sometimes amused at the opposition made to our young men when they first settle down to practice physic, by bigoted old thick-heads, who could not bear an examination before any Faculty—either old or new school. The young physician will, however, soon get practice, and the results will be heralded around, much to his profit and the vexation of the old doctor. We always advise our students to pay no attention to the practice or number, or influence of allopathic physicians. Find a place to suit you, and then settle; practice will come, and that in spite of opposition from old-schoolmen. It is only necessary to compare the two systems to demonstrate the superiority of our own. In the cholera season of 1849, in this city, our practice was gloriously sustained, and we venture to affirm that under all circumstances, the average income of Eclectic physicians is 30 per cent. more than that of Allopathic.

FEMALE MEDICAL DOCTORS.

We have recently received letters from several women, inquiring why the Eclectic Medical Institute changed its policy and prohibited their sex from becoming doctors. We will answer in a few words, viz: we found the whole matter resulted unfavorably; that no good followed to either the College or the profession.

Our opinion is that women were never intended for the labors of the profession. Their sphere is fully referred to in the following remarks of one well qualified to judge:—

WOMAN'S SPHERE.—The following excellent remarks are taken from the remarks delivered by the Hon. G. W. Clinton, at the County Fair, at Flushing, N. Y. It is the ladies he is addressing:

In enumerating the sources of the peculiar felicity which the world attributes to your lot, my fair hearers must not ascribe to flattery the declaration that the chief one is, in my fixed judgment, the fact that it places woman in her proper sphere as wife, helpmate and mother. I have no respect for, scarce any patience with, the "strong-minded woman." Like an effeminate man, she is a mistake of nature, or a sad perversion of the truly beautiful and good. But I do reverence true woman—gentle, heroic, pious woman—man softened, refined and bettered. The two united in holy matrimony are indeed one, and that one is man—the only full, true exposition of our nature. Where this doctrine is not recognized, and the sexes do not pair in marriage, there can be none of those enjoyments which cluster around the Christian hearth and bless the Christian household. You can not degrade only one half of human nature, and if you debase woman, you debase man more deeply.

Wherever these truths are unfelt, lust roams unbridled, and man is brutal or inert. Disguise the canker as you will—call it Mahometanism, Mormonism, Spiritual marriage, or what you please; wherever polygamy is lawful, or easy divorce makes marriage a mere form, there woman can be but a slave or a mere toy, and man a brute or a barbarian, a scourge of the world or a base voluptuary. How much of prosperity does our country owe to its women? Is it too much to say that our freedom was achieved as well by the wives and daughters of America, as by the heroes whom they formed for patriotism and sent forth to suffering and to battle? While the British government was pursuing that long train of arbitrary measures which led to armed resistance and liberty, the mothers of America had perhaps unacknowledged prescience of the coming war, and prepared the way to victory. Then it was that the noble elegy of Collins was taught to the children at their knee:—

> "How sleep the brave who sink to rest,
> By all their country's wishes blest!
> When Spring, with dewy fingers cold,
> Returns to deck their hallowed mold,
> She there shall dress a sweeter sod
> Than Fancy's feet have ever trod.
>
> By fairy hands their knell is rung;
> By forms unseen their dirge is sung;
> There Honor comes, a pilgrim gray,
> To deck the turf that wraps their clay;
> And Freedom shall awhile repair,
> To dwell, a weeping hermit, there."

That elegy, so taught, made and contributed to make many resolved patriots beside Samuel and John Adams, and it may have its uses yet. And then, had it not been for the teachings of his mother, George Washington would never have risen to be "first in war, first in peace, and first in the hearts of his countrymen."

But I mean not to attempt the praise of woman, but simply say, what you have, I presume, anticipated, that marriage is essential to the successful conduct of a farm; that rural avocations lead the man and woman duly to appreciate and respect each other; and that when woman properly appreciated rules in her department, there is indeed sweet home—there will pure womanly refinement have due occupation, and adorn and consecrate the house, and create and beautify the garden.

Can a Person be Chloroformed, &c.?—In a case recently tried, this question was sprung, and experts differed in their opinions. The matter was settled by Dr. Miller, who experimented on ten persons in the Commercial Hospital, only two of whom awoke, while eight were profoundly anæsthetized. Thus it appears that chloroform, so great a blessing to the human family, may become a powerful instrument in the hands of designing men, to accomplish their nefarious purposes. Every good has its evil; every rose its thorn.

ECLECTIC MEDICAL INSTITUTE.

The closing exercises of the Eclectic Medical Institute for the winter session of '59 and '60 took place in the College Hall on Wednesday evening, Feb. 8th. The weather was beautiful, and the room crowded to its utmost capacity. Menter's celebrated band being present, discoursed sweet music for the audience. The exercises were opened by prayer from the Rev. S. L. Yourtee. A report of the session was then made by Prof. R. S. Newton, from which it appeared that the number of matriculants were one hundred and fifty-three, forty-four of whom had passed a rigid examination, and been deemed qualified to receive the honors of the Institute. The names of the following gentlemen being called, they appeared before the *rostrum*, and the degree of Doctor of Medicine was conferred by N. Headington, Esq., Pres. of the Board of Trustees. In addition to these, honorary degrees were conferred upon four gentlemen:—

GRADUATING CLASS.

M. A. Arnholt, Jr., Illinois.
J. P. Backeste, Missouri.
D. S. Brock, Tennessee.
H. D. Cobb, Michigan.
W. H. Castle, Ohio.
A. M. Clingman, Arkansas.
A. F. Cory, Indiana.
I. Dever, Ohio.
R. P. Eddy, Rhode Island.
D. Ewing, Indiana.
M. Faloon, Indiana.
J. Gaskins, Ohio.
L. S. Garner, Michigan.
G. Hays, Indiana.
J. R. Haynes, Kentucky.
J. A. Henshall, Ohio.
R. Jones, Mississippi.
F. M. Kirkham, Iowa.
J. Moorman, Ohio.
J. W. Pruitt, Arkansas.
M. Pettiner, Ohio.
A. Prichard, Kentucky.
C. Rigg, Kentucky.
J. P. Reichard, Maryland.
E. E. Spencer, Massachusetts.
C. M. Stewart, Tennessee.
E. Stevenson, Tennessee.
C. B. V. Spiegel, Tennessee.
J. B. Shultz, Indiana.
L. W. Smith, Illinois.
A. R. Sawyer, Illinois.
C. P. Smith, Ohio.
G. W. Seay, Kentucky.
J. H. Tankersley, Mississippi.
J. H. Thompson, Iowa.
R. A. Walford, Indiana.

A. Kelley, Tennessee.
J. S. Masterson, Illinois.
A. McKinney, Ohio.
J. W. Murphy, Indiana.
E. M. Winters, Illinois.
H. P. Whitford, New York.
H. B. White, Pennsylvania.
W. L. Wilbur, Illinois.

HONORARY GRADUATES.

John Travis, Tennessee.
William Hays, Indiana.
H. P. Riden, Georgia.
H. Stiles Bradley, Georgia.

After the degrees were conferred, the audience were entertained by an appropriate, able and eloquent address from W. F. Hurlbut, Esq., Vice Pres. of the Board of Trustees.

At the close of this discourse, the following preamble and resolutions, not in the regular programme of the evening, were read by Dr. Wilbur, chairman of the committee:—

At a meeting of the graduating class of the E. M. Institute, held in the hall on the evening of the 7th inst., the following preamble and resolutions were unanimously adopted:—

Whereas, The members of this class are about to separate, in all probability never to meet again this side of that "bourne from whence no traveler returns," and deeply realizing the obligations that they are under to the members of the Faculty of said Institute, for the able, thorough, scientific and courteous manner in which they have discharged the duties devolving upon them; therefore,

Resolved, 1st. That our thanks are hereby sincerely tendered to the Faculty, individually and collectivety, for the same, with the assurance that under all circumstances, trials and vicissitudes, it shall be our highest aim so to carry out the broad and liberal principles inculcated, as to reflect credit upon them, and honor upon the cause of Eclecticism.

2d. That the honors they have been pleased to confer on us, shall ever serve to stimulate us to renewed exertion in the cause of humanity, rational medicine, and to cherish for our *Alma Mater*, feelings of deep and lasting respect.

3d. That in *our* profession, we recognize neither sect nor creed, but standing on the broad platform of medical science, bid a hearty welcome to all, who, by their acquirements and gentlemanly deportment, evince their title to confidence and esteem.

4th. That these resolutions be read by the chairman of the committee as a part of our closing exercises, and that they be published in the *Eclectic Medical and College Journal*, and in the *Family Journal of Health*.

Dr. W. L. Wilbur, *Sec.* Dr. A. M. Clingman, *Pres.*
Com.—Dr. Wilbur, Chr., Dr. J. H. Tankersly, Dr. M. A. Arnholt, Dr. H. P. Whitford.

After the exercises were over, the following resolutions were offered to the class by A. M. Clingman, M. D., and unanimously adopted:—

Resolved, 1st. That from our intercourse with the faculty of the E. M. Institute, during the session just closed, it is our opinion that there has been perfect unity of feeling and purpose existing among the members of said faculty.

2d. That the union of the two Eclectic Medical schools, marks an era in the success of Eclecticism, and whatever of a contending element, that, in consummating the union, flew off at a tangent, has well nigh spent its force.

3d. That there has been the utmost degree of good feeling among the entire class.

4th. That for the information of those who may wish to embrace the advantages of a thorough course of lectures on the various branches of medical science, that this Institute never was in a more permanent condition, or more worthy their confidence.

5th. That these resolutions accompany those adopted by this Class on the 7th inst., and be considered a part of the same.

Everything passed off pleasantly, and all parties seemed satisfied. This has closed another session in the Institute, whose prospects now are more flattering than they have ever been. Unity pervades among the Faculty, and all seem resolved to work for a common good. We congratulate the friends of the Institute on the existing state of things, and her enemies have cause to be jealous of her prosperity and prospect for entire ascendancy.

BOOK AND JOURNAL NOTICES.

THE AMERICAN ECLECTIC MATERIA MEDICA AND THERAPEUTICS. By Professors L. E. JONES and J. M. SCUDDER. Vol. ii. Moore, Wilstach, Keys & Co.: Cincinnati. 1859.

It affords us pleasure to announce that the above work is now out. The first volume has been before the public for some time, and speaks for itself. The second volume is devoted exclusively to a consideration of the articles of the Materia Medica. We have not had time to examine it minutely, and are not prepared to set forth the strong claims it possesses for public favor, which a superficial examination induces us to believe it has. The reputation of its authors are a sufficient guarantee of its intrinsic merit. At a future time we shall give it a critical and impartial notice. Price of both volumes, $6; of the second alone, $4. Address J. M. Scudder, M. D., Box 2209, Cincinnati.

THE FAMILY JOURNAL OF HEALTH. Edited by JOHN M. SCUDDER, M. D. Terms, 75 cts. per year.

The first number of the above Journal is before us. It is the intention of the editor to make it both instructive and interesting, and to have it contain such information as will tend to the promotion of health. If the succeeding numbers equal the first, the promises will be fulfilled; and from the energy and enterprise manifested by Dr. Scudder in all he undertakes, we can safely predict that his subscribers will not be disappointed.

We welcome the *Family Journal* to our boards, and wish its editor all success in his new enterprise. Address J. M. Scudder, Box 2209, Cincinnati.

THE AMERICAN DRUGGISTS' CIRCULAR AND CHEMICAL GAZETTE; a Practical Journal of Chemistry, as applied to Pharmacy, Arts, and Sciences, and general Business Organ for Druggists, Chemists, and Apothecaries.

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EDITORIAL ABSTRACTS AND CLIPPINGS.

Sanders' Illuminating Water-Gas. What Is It? The Theory of its Combination.—The production of illuminating and heating gas from water has occupied the attention of Dr. Sanders for the last five years. This great problem in practical science has been worked upon in England, France, and Germany, for many years, but the records left us, of their investigations and the repeated attempts to put them into practice, prove that they have all signally failed. Dr. Sanders has been accused not only of having patented analogous processes followed in England, but actually of having copied their specifications in their own language; but those who possess the least ability to judge of chemical processes can at once discern the wide difference between Prof. Sanders' process and those of all others who have preceded him. The great error of those who have experimented in Europe has been that they have attempted to force a *gas* to combine with carbon. Now a gas is really solid matter combined with heat, and therefore would come under the designation of a *caloride.* It is impossible to force a gas to combine with caloric. This has been the great error of the European experimentalists, for they have disregarded the great law of chemical combinations, by not taking cognizance of the nascent condition of bodies. Instead, as has been the case with Dr. Sanders, of availing themselves of that moment when the gaseous body is in its nascent state, and thus attaining the compound sought, they have attempted to force a gas or a caloride to combine with carbon. Let us explain still further. The European chemists have passed their water vapor through ignited charcoal in the presence of heated iron, or else through ignited iron *per se.* In either case they get hydrogen gas, while the oxygen of the water is occupied in oxidizing the iron. This hydrogen gas then combines with one equivalent of carbon, and thus they get light carbonated hydrogen gas. This gas they afterward attempt to force into combination with carbon, in order to convert it into heavy carbonated hydrogen illuminating gas. Now if they would avail themselves of that moment of decomposition when the constituent gases of water are leaving their combinations with each other, and before they have combined with caloric, or during their nascent state, as it is termed in chemistry, they would then have Sanders' water-gas. They have not done this. Instead of bringing all the constituents composing the water-gas, that is, the vapor of the water and the carbonaceous matter, into direct contact in the ignited charcoal, where they would be enabled to combine while in their nascent state, as Prof. Sanders has done, they have attempted to force the elements, after they have assumed the gaseous state, to thus combine, and consequently their failure. This is the great distinction between Sanders' water-gas and those other processes which he has been accused of repeating, but which, it will be perceived, are not at all analagous. In fact, the strongest proof of the non-identity of the American and European processes is simply that the latter admit a failure, while the former is a triumphant success.

In conclusion, we would speak of the accusations which have been made by the enemies of this gas against its qualities as an illuminator. The odor of the water-gas is pleasant, somewhat resembling that naphthalous smell characteristic of Benzole. Therefore, the statements of interested persons, that the gas possesses the most fetid odor is erroneous. It is true that upon first admitting the water-gas into pipes through which that vile-smelling stuff, coal-gas has passed, it is attended with a very offensive odor; but that odor is derived from the debris of the coal-gas, which the denser water-gas quickly absorbs. As soon, however, as the pipes are thus cleansed, this disagreeable odor ceases, and we get the pleasant naphthalous smell of the water-gas. That the water-gas burns dim, as was asserted, is likewise erroneous. Hundreds of the most delicate photometic experiments have proved that the water-gas, unpurified, gives about one third more light than coal-gas.

Prof. Sanders labored in his laboratory for two years in investigations upon the subject of water-gas. Before commencing his own experiments he repeated all those made by others, and thus he possessed the advantage of others' experience, for there is as much knowledge to be gained by a failure as by a success. He therefore commenced where all others had left off, and thus his success in the rectification of others' failures.—*Scalpel.*

Amputation of a Uterus.—Dr. Sims, of New York, recently amputated an entire uterus with the ecraseur. The case was one of procidentia, in which the uterus had been for a long time entirely inverted, and could not be forced back into the pelvis. No hemorrhage followed, excepting from a vessel connected with one of the broad ligaments, which was afterward ligated. The patient rapidly recovered.

This operation has been repeatedly performed, but we do not know that it has been before accomplished with the ecraseur. The result of the operation has usually been fatal, from peritonitis or hæmorrhage, and surgeons have not generally been favorable to its performance.

Incisions in Anthrax.—MAURICE H. COLLIS, Surgeon to Meath Hospital, says (*Dublin Quarterly Journ. Med. Sciences*, August, 1859) that "the incision into anthrax, whether made early or delayed till sloughing has done part of the surgeon's work, must be deep rather than extensive. Usually, it is said, anthrax is a flat swelling. The fact of its flatness, or rather of its extent, hides the real amount of elevation, which is, in most cases, considerable. Hence incisions into the anthrax seldom go down *through* the inflamed skin and areolar tissue. But even if they did go down to the fascia, they would fail in effect unless they also went through it. The fascia is highly inflamed in anthrax; in fact the essential difference of anthrax from furuncle consists in the inflammation being deeper, and implicating the fascia. When the fascia is inflamed, much plastic exudation takes place, both in its substance and under it; and the tendency of anthrax to spread indefinitely is to be thus accounted for. The pent-up plasma, quickly producing pus and slough, can get no vent until there is an adequate opening in the fascia, and this opening should be made by the surgeon as early as possible, if he would avoid the unpleasantness of useless and repeated cutting, and the extensive sloughing which will occur if he neglect to make it. Plastic exudations find facility in traveling under the fascia, dissecting and destroying its vascular connections, and ultimately causing much of it to perish. This is well known as a general principle of surgery, and it is strange to find it overlooked as the cause of the spread of anthrax. We readily acknowledge the mischief it does in periostitis, in diffused inflammations of erysipelatous character or connected with paronychia, and in many other analogous cases; but books of surgery are, for the most part, silent about it in the case of anthrax. And yet every one must have observed phenomena which can only be explained by it. The extent and mode of extension of the swelling, the real depth to which the surgeon must cut if he is to do good rather than harm, and the fact of large flakes of fascia ultimately coming away as dead core (in addition to areolar tissue), leaving the underlying muscles bare, must have been often observed, and must often, doubtless, have had their influence on the practical observer; but the junior surgeon and the pupil have not been shown their practical bearing. The rule I have given above, to cut deep rather than wide, is founded on the observation of these facts, and will be found satisfactory, saving the surgeon the opprobrium of cutting twice or oftener without benefit to his patient. It is very easy to know when we are deep enough; by taking hold of the flaps made by our crucial incision, we feel if they are quite loose. Our incision is not deep enough unless we can lift up the point of each flap with ease from the parts underneath. This can not be done unless our knife has gone through the fascia, and made a crucial incision in it almost as extensive as in the skin. The wounds we have made should be almost as deep at their extremities as in the center, where they intersect. If we have made our incisions early, before actual sloughing has commenced, as we sometimes, though rarely, have an opportunity of doing, the flaps will curl up if the wound is deep enough, and will leave a widely gaping wound; but if we do not see the anthrax until more or less of the skin is undermined and dead, the gaping of the wound will not be so marked, and the best test is the one I have given above, of lifting the flaps with a forceps, and proving that they are loose. If this rule is followed, we will have few cases in which we must come and cut again.

The Black Doctor.—The medical and scientific world in Paris have, for over a year, been greatly excited by the presence in that metropolis of a man who pretended to have discovered sovereign cures for a variety of the ills that flesh is heir to, but whose speciality was the cure of cancer. This person, whose name was M. de Vries, appeared suddenly in Paris, giving out that he was a Javanese, and came from Surinam, by way of Holland. He was of swarthy complexion, and called himself, or had his friends call him, the Black Doctor. He had plenty of money, was a man of fine presence, magnificent carriage, great pomposity of manner with those whom he wished to impress, and great suavity with those whom he had already won to his side. He gave excellent dinners, lived in elegant style, and always counted amongst his most favored guests the popular feuilletonists of the Paris daily press. He made his way quietly, spending large sums, and apparently not making much for some time. He was assiduous in his attentions to the poor, treating all their complaints without hope of reward of any kind.

At last he was called to visit a celebrity. M. Sax, the world renowned inventor of the Sax-horn, who will be remembered with pleasure by those who attended the delightful concerts given by his family in this city, some nine or ten years ago, was afflicted with a grievous cancer upon the lip, which was a decided obstacle to the pursuit of his profession. He could no longer direct the exquisite music of his band. It was almost unheard of torture for him to press his favorite instrument to his mouth. He had the best advice Paris afforded. M. Ricord and M. Velpeau—surgeons whose fame extends to the ends of the earth—were his attendants, and exhausted the resources of science to relieve the sufferings of their friend, but all to no good result. They told him, finally, that he must submit to an operation—that his face must be laid open, and his whole cheek taken away to the back of the neck. M. Sax had suffered with his cancer for eight years. He could not sleep. He had furious pains in the head that made him fear that he was going crazy. For three years his disease had been growing worse, despite all the efforts of the faculty to relieve him. Yet he could not make up his mind to lose his cheek. No—he would rather die than be deprived of all hope of using his beloved

Sax-horn once more. What was life without music? And how could he make music without a lip? He resigned himself to his fate.

At this time, when his learned medical friends had advised him to make his will, M. Sax heard accidentally of the Black Doctor. He sent for him. The Doctor examined him, and told him all he would have to suffer, how the disease would progress, and what the end would be. He promised a cure, and undertook the treatment. As he proceeded, the disease developed itself. The patient's mouth was almost entirely closed, the tumor was first of a slate color, and then of a deep violet; and finally the cancer became so violent that the friends of M. Sax assured him that he could not live twenty-four hours. The Black Doctor, however, remained calm, and made light of the croakers. He insisted upon M. Sax having his photograph taken, because, as he said, after he was cured, the faculty would deny that he had ever been so sick. His desires were complied with, and he then promised that within a week, instead of being in Pere la Chaise, M. Sax would be able once more to revisit his old resorts. And sure enough, two days afterward the tumor fell off; the pains in the head entirely disappeared; his lip soon became red again, and within the week M. Sax was perfectly cured. Then the Black Doctor gave a proof of nobleness of character. He had agreed to effect the cure for three thousand francs, but learning that M. Sax was in straightened circumstances he refused to accept the third thousand.

M. Sax has many friends, and among them nearly all the popular journalists of the day. They gave a grand banquet at the Hotel du Louvre to mark his recovery, and at this feast the Black Doctor was toasted and eulogized as the greatest of his profession. The particulars of M. Sax's cure was served up in all the papers of the next day. His portrait was published in L' Illustration. The feuilletons of the daily journals overflowed with anecdotes of his skill and his benevolence; and, in short, M. de Vries, the Black Doctor, found himself a celebrity. He attracted the notice of the Faculty, and was invited by M. Velpeau to try his system upon the charity patients of the great hospitals. He consented, and seventeen patients were put under his care, all of whom he undertook to cure within six months. The whole city was now moved about the Black Doctor, and his fame spread to England and even to this country. He had his warm admirers and his bitter opponents, but preserved his calm onward course, regardless of praise or censure. He lived in the greatest luxury, drove the most elegant equipages, and bore himself with the air of a prince. His private office was crowded with patients of wealth and rank. His fees varied from one to forty thousand francs; and he never looked at a wealthy applicant for his services without having one-third of the money paid in advance. For a month the Black Doctor was at the pinnacle of fame; in the second month the faculty doctors who had invited him to the hospitals, began to suspect that he was not all he pretended to be, for his patients got worse instead of better. At the end of the second month M. Velpeau, who had brought him to the hospital, reported to the Faculty that the Black Doctor was not fit to be trusted with the lives of patients, for all the cancers he had under his charge were growing worse, and some of his victims were at death's door. So the Faculty, nothing loth, voted M. de Vries a humbug, and expelled him from the hospital.

The cry of persecution was then raised by the Black Doctor's friends; for a while he kept Paris society in a ferment with the hot quarrel about him. It was even rumored that Imperial Majesty took an interest in the matter, and had had an interview with M. de Vries. The Faculty, however, did not do things by halves. They discovered that M. de Vries had no diploma, although he was inscribed on the medical registers as a doctor of Leyden University, and paid five hundred francs a year for his license. So they procured an interdict against him, as it is not legal to practice medicine without a diploma in France. The Black Doctor, however, continued his profession without paying any regard to the machinations of the Faculty, and at last they proceeded to extremities against him. The Paris papers of the 5th of January, come to us with a long report of the commencement of the trial of M. de Vries, "Le docteur noir," before the Correctional tribunal of the Seine, on charges of the illegal practice of medicine and pharmacy, and swindling. In the course of the trial it appeared that the Black Doctor honored this country and England with his presence before going to France. His course of life here did not transpire; but under the skillful cross-questioning of the President of the Court, he acknowledged that in England he had played the role of a prophet, pretending a special commission from heaven to organize a new religion; and tried to get up a league against the Pope—at the same time practicing medicine. Afterward, he broached a plan to unite all the sects and build a great temple for them to worship in. Then he turned his attention to perpetual motion, and wrote a book.

Finding that he did not succeed in England, he went to France in 1853, and almost immediately got into the Clichy prison for debtors. While there, he was converted to the Roman Catholic faith, and gave a grand banquet to celebrate St. John Baptists day. Then he published a plan to supersede steam in locomotive engines, by a combination of magnetism and electricity. Afterward, he projected a Temple in honor of Solomon on the Champs Elysees, and advertised for plans, offering a prize of 2,500 francs for the best. Next, he gave a *fete* at the Hotel de Louvre, which cost 12,000 francs; and it was not until by these and similar means he had attracted the notice of the public, that he commenced the exclusive practice of his medical vocation. Alas for fame! The poor Black Doctor was stripped of his feathers, and denounced by the public prosecutor as a charlatan of the most stupendous kind. Of his seventeen cancer patients fifteen had died, and two were reported to the court to be breathing their last. Yet he produced twenty-five persons besides M. Sax, who swore that he had cured them, and looked upon him as a Savior come down from heaven to them. The court had not pronounced its judgment when the steamer left; and we have yet to see, therefore, whether M. de Vries shall go down in history as one of the most scientific men or one of the greatest humbugs and scamps of the present age.—*N. Y. Evening Express.*

CLINTON, *Wisconsin.*

PROF. NEWTON:—I wish to add my testimony in favor of Belladonna, as an anti-lactescent, if an isolated case is any testimony.

MRS. S——, about 22 years of age, a robust woman, of sanguine temperament, losing her first child, it being still-born, the flow of milk was excessive, causing great annoyance, and the usual remedies were ineffectual in drying up the secretion; and I happened to think that I had seen somewhere, that Belladonna was recommended as an anti-lactescent, and immediately prescribed it, not as recommended by Dr. John Buchanan, but by giving ¼ gr. of the Ext. three times per day; which had the most gratifying result, the secretion drying up in a few days.

GEO. COVERT.

For Bronchitis.—℞. Bloodroot,
Elecampane,
Boneset,
Wild cherry bark,
Sweet gum resin, *a*, *a*, ℥ iv.
Refined sugar, ℔ iv.

Place all but the sweet gum and sugar in some convenient vessel, and pour sufficient diluted alcohol on them to cover them, and digest four days, then filter, add the sugar and sweet gum, and dissolve by gentle heat, making one half gallon of syrup.

Dose.—One table spoonful four times per day.

I have used this pretty extensively in that form of chronic bronchitis, following the epidemic acute variety, where, to all appearances, the patient was in the last stages of consumption, and never knew it to fail in a single case. In very bad cases, it will require a perseverance in its use two or three months.

J. W. PRUITT, M. D.

A Euphuist Cured Homœpathically.—A boyish looking youth officiates as clerk in a drug store, when his services are required, behind the soda fountain. A few mornings since, a fashionably dressed, poetical-looking young gentleman entered, and, seating himself on a stool, in a choice selection of terms requested the clerk to prepare him a seidlitz powder. Clerk—"with syrup?" Customer (slowly and methodically)—"I require it not as a refreshment. If the syrup vitiate not the effect of the compound, you may mingle with it such an amount of the substance as will render the potation palatable. Or to be better understood"——Clerk (interrupting)—"I comprehend you perfectly. Permit me to assure you that the tendency of the syrup will be rather to enhance than diminish the purgative virtues of the drug." Customer (indignant at observing that his style is affected by the other)—"Then proceed, miracle of medical literature and wisdom!" Clerk—"With dispatch, confounder of fools." Customer—"Then, if not struck motionless, use haste." The clerk evidently felt cut at the last remark of the other, but the mixed powder, which the stranger triumphantly swallowed, paid for, and started to leave the store, when—Clerk—"Should you find any uneasiness in the stomach within the space of fifteen minutes, illustrious patron, attribute the cause to the accidental introduction into the draught you have just taken, of some drugs of various effect and painful consequence." Customer (a trifle frightened)—"If I do, confound your impudence, I'll punch your head." Clerk—"I thought I'd bring you down to plain English; but I guess you will find the powder all right." Exit customer, with his coat tail standing straight out.—*Penny Press.*

A new Artificial Light in England.—An improved form of the lime light originally experimented upon by Capt. Drummond, some years since, was shown by Sir Charles Bright in the Exchange news-room, Liverpool, on Saturday last. No substantial improvement has been made in artificial lighting since the introduction of gas at the commencement of the present century, and the steadiness, continuity, and diffusiveness of the new light, as well as its enormous power, were fully shown. A single jet of the improved lime light is estimated as equivalent to 40 Argand, or 80 fishtail burners, each consuming five cubic feet per hour, or to 400 wax candles of four to the pound, and its power, unassisted by a reflector, was stated to be 40 times greater than the present oil lamp; and for coast lights, under the same circumstances, should the light be as economical and capable of as easy manipulation as it was on this occasion, there can be no doubt it will effect a considerable change in the lighting of lighthouses, public rooms, large thoroughfares, and probably of factories and other crowded places, where the present system of extracting the oxygen requisite for respiration from the air is so objectionable.

Treatment of Ingrowing Toe-nail.—Dr. N. Gilman, of Hatfield, Mass., (*Boston Med. and Surg. Journal,*) has for over twenty years treated ingrowing toe-nail by cauterizing the part with hot tallow with the most satisfactory results. He says, the liquid cautery insinuating itself into every interstice, under the nail, along the fistula into the ulcer at the matrix of the nail, accomplishing in one minute, without pain, all that can be effected by the painful application of nitrate of silver for several weeks, or the barbarous plan of pulling out the nail. The following case will illustrate Dr. Gilman's plan of procedure.

The patient on whom I first tried this plan, was a young lady who had been unable to put on a shoe for several months, and decidedly the worst case that I have ever seen. The disease had been of long standing. The edge of the nail was deeply undermined, the granulations formed a high ridge, partly covered with skin, and pus constantly oozed from the root of the nail. The whole toe was swollen and extremely tender and painful. My mode of proceeding was this:—I put a very small piece of tallow in a spoon, and heated it over a lamp till it became very hot, and dropped two or three drops between the nail and the granluations. The effect was almost magical. Pain and tenderness were at once relieved, and in a few days the granulations were all gone, the diseased parts dry and destitute of feeling, and the edge of the nail exposed so as to admit of being pared away without any inconvenience. The cure was complete, and the trouble never returned.

Treatment of Obstinate Granular Ophthalmia by the Local Application of a Solution of Chromic Acid.—D. Harion recommends a solution consisting of equal parts of chromic acid and distilled water as a useful application to granular lids. It is applied by means of camel's hair pencil, and is, he says, neither very painful nor followed by any great amount of reaction. Of fourteen cases treated by it, in eleven the result was satisfactory. The cauterizations were made at intervals of four, six, or eight days, and the time occupied in the cure was from four weeks to four months. Considerable prudence is required in the adoption of his mode of treatment, which is only recommended in obstinate cases.—*Archiv. Belge de Med. Milit.*, Sept. 1858.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

Article I.—*Address, delivered at the closing exercises of the E. M. Institute for the Winter Session of* '59-'60. By W. F. Hurlbut, Esq.

Gentlemen of the Graduating Class:—In accepting the invitation of one of your Professors, to address you on this occasion, I am not certain that I have not mistaken my calling. It has occurred to me, that it would have been more appropriate, if some one from the ranks of your own profession had been selected to address you; for what, with a knowledge of the wants and peculiarities of your profession, together with an experience that would have justly entitled him to an attentive hearing, something of an eminently practical character would doubtless have been presented to you, which I may not hope to offer. And yet there are considerations which I hope to lay before you, at this time, which are not altogether unworthy of your most serious reflection; especially at such a time as this, when you are about to enter the perilous arena of life for yourselves, and engage in combat with the myriad difficulties that will spring upon you from every quarter, and encounter you at every step.

You have chosen your profession; you have taken the preliminary steps necessary to commence the discharge of your duties in that profession; you have received your commission from the legally constituted authorities of this Institution; and now, what remains? It would be an impeachment of your common sense, if not a denial of the existence, within you, of that desire that "springs eternal in the human breast," to suppose, for a moment, that you do not all look forward to a successful professional career—to success in the great struggle of life, in which, it is to be presumed, you are now about to er gage, in earnest. The goal before you, then, is success. The magic word inscribed on the banner that floats before you and waves you on, is success.

But what are the essential requisites of success? The answer to this question involves many important considerations; but in the short time which I propose to occupy, I can hope to spread before you, only some of the more prominent of these considerations, which, at this time, it will be wise for you all to ponder carefully and well.

Doubtless one great element of success, in every vocation, is aptitude. There must be, pre-eminently, a natural, not acquired, fitness, in every man, for the calling in which he engages, or the chances of success will be against him. Let me illustrate. May not a sovereign possess a thorough knowledge of the wants of his people, and of that form of government best suited to their peculiarities and condition, and yet fail, most signally fail, in the practical application of that government, simply from a want of the requisite executive talent? May not a man have extensive attainments, in a wide range of sciences, and, so far, be eminently fitted for the calling of a teacher, and yet entirely fail of success, in that position, either from want of ability to control the pupils under his charge, or to impart the knowledge he possesses? May not a man have an intimate knowledge of Anatomy, and possess all the courage and steadiness of nerve requisite for a skillful surgeon, and yet totally fail in that department, by reason of not having that facility and delicacy of manipulation which are also necessary? Again, may not a man be familiar with all the agents of the Materia Medica, and all the formulas of the Pharmacopœia, and yet, from want of ability to enter into an investigation of all the minutiæ necessary to a complete diagnosis, utterly fail, in the proper treatment of a given case?

Undoubtedly there are many whose mental endowments are so evenly balanced—who, in other words, possess such a versatility of talent, as to be about as well fitted for one calling as for another. To such, other things being equal, the chances of success are about equal—never very flattering, never very discouraging—always preponderating, however, in favor of those who employ all the appropriate means of success, with the greatest prudence and assiduity. But this only serves to illustrate, more forcibly, the absolute necessity of a natural adaptation to the peculiarities of one's calling. Depend upon it, if you are not adapted, by a peculiarity of constitution, for the work before you, weigh the chances of success as you will, the preponderance of the chances will be against you.

Another essential requisite to success, is labor. "There is no excellence without great labor." This is a truism which all readily admit, and yet but few duly appreciate. Be assured that success is generally on the side of him who works to win it. Not always, indeed, "is the race to the swift," nor "the battle to the strong," nevertheless it is generally true that victory crowns the faithful struggle. Would you accomplish great achievements? Remember that the magnitude of your efforts must be commensurate with the magnitude of your achievements; remember, too, that great efforts are never put forth excepting in obedience to powerful volitions. Furthermore, you must never pause in your work, because it seems, at times, beyond your power to compass; nor must you hesitate to go forth, for fear there may be "a lion in the way." If you sit down and undertake to determine the amount of labor that may be necessary to accomplish a given enterprise—or, if you hesitate to engage in it because there may be hazard in it, the probabilities are that you will never dazzle the world with the brilliancy of your achievements. When Napoleon reached those formidable battlements that nature seems to have thrown up for the protection of Northern Italy, did he pause, because of the seeming impossibility that lay before him? Even though he saw avalanches suspended above his army, on threads so slender that a breath might break or a sunbeam sever them, did he pause, because of the danger that threatened the destruction of the power by which he hoped to win glory for himself and France? "Is the route practicable?" inquired he, of his engineer. "It is barely possible to pass," replied the engineer. "*Let us set forward, then*," was the command of the intrepid soldier of Corsica. Alps can be crossed, but not without great labor, not even without great hazard. Mountains can be dissolved, hills laid low, seas bridged and valleys spanned, but not without great labor. All things possible to man, are his — the price to be paid therefor is labor. Labor, it is true, to be effectual, must be guided by intelligence. Your plans should be formed with all the wisdom you can command, but when once formed, summon all your energies to their accomplishment, resolved to give neither "sleep to your eyes nor slumber to your eyelids," until the "consummation devoutly to be wished," is realized. Difficulties will undoubtedly arise in the execution of your plans. Human sagacity is not omniscient. But never falter because your plans do not always work harmoniously—modify them, and go on. Let no discouragement dampen your ardor—let not even failure abate one jot or tittle of your energy, especially when in pursuit of some grand discovery which seems to lie just before you, and which eludes your grasp only for the time being. Work on, right in the very face of discouragement and derision, if necessary—nay, even against a plausible array of learned demonstration. Remember that, whilst one man was undertaking to demonstrate to the world, the utter impracticability of steam navigation, on the ocean, another was building his steamer—and, before the former, in the profundity of his logic, had reached his "*quod erat demonstrandum*," the latter had steered his proud steamer safely to her moorings, on the other side of the great waters. Work on, work ever. The wide circle of science legitimately embraced within the sphere of your profession, can never induce the very serious apprehension that you will not have work enough to do. The field which you have entered admits of the profoundest researches. The Arcana of Nature are inexhaustible. It only requires a bold hand to delve for them, and they will spring to light, from their dark recesses, ready to go forth, at your bidding, on their missions of good to the world. Resolve, and your work is half done—nay,

> "The purpose firm is equal to the deed."

Resolution—not that which "resolves, and re-resolves, then dies the same"—but that which brooks no barrier—aye, laughs at opposition—*this* is the power that compasses all possibilities. An indomitable will, even without the lever of Archimedes, seems almost adequate to the moving of the world. It is a power akin to Omnipotence. Sometimes, indeed, a consciousness of power exists in a human soul, where the will is too weak to set that power to work—but when the will to do, and the power to do, unite, behold a soul, mighty in its deeds, and terrible in its sway.

Enterprise, or a reasonable spirit of adventure, may be regarded as another element of success. Without a proper degree of this spirit, there is no progress, and without progress there is no great compass or completeness of success. I do not mean, by this spirit of adventure, a headlong dashing into new fields, simply because of their novelty. I mean a readiness to enter new fields, for the sake of discovering new truths—a readiness to discuss new theories, and to embrace them, if found true—a readiness to abandon old formulas when found to be useless—a readiness to engage in experiment, in all departments where it is both proper and safe.

All knowledge, both of the science and art of medicine, has been derived, almost entirely, from a diversified series of experiments, extending through a long period of time. And herein we see the character, as well as extent, of the field in which your calling lies. In the present condition of the science, indeed, all is not experiment. Some principles are fixed, because they are recognized as universal and immutable; but much, very much yet remains to be discovered by experiment. And no physician who aims at eminence in his calling, or the attainment of the highest amount of good to his fellow men, so far as his profession can conduce to it, will ever confine himself wholly to the tread-mill round of the books.

True, he should know what is in them, but he should, to some extent, be impatient of their restraints. He should, and must, experiment. He should, and must be, wise, above what is written in the books. It is as great a folly to suppose that all the formulas found in the Dispensatory are correct, or that the specifics compounded by them are infallible, as it is absurd to suppose that all laws are necessarily just, or preventive of crime, because they are found inscribed upon our statute books. All knowledge and all truth are not yet written. It can not, for a moment, be assumed, that medical science has yet reached its maximum hight. Its present condition is but the aggregate experience of the past. The future is to add the wealth of its experience. And every enterprising physician, instead of resting satisfied with the few general and accepted principles that underlie the present systems of practice, should take these principles only as the premises, as it were, of further investigations and discoveries, in fields yet unexplored. And who will say that these fields are limited in their extent? Who will prescribe the boundaries of the forces and resources of Nature? All the causes that affect the physical man, and all the remedies that may minister to his ills, are not yet known. There is still a broad field for experiment and discovery. But I would not have all admitted within its sacred precincts. I would allow only the truth-loving and the pure in heart to enter there. Over the portal of this inclosure, I would have written, in flaming characters, "*Procul, O procul, este profani*"! For I would have every one who enters there, remember that the subjects of his experiments are "golden bowls," which, holding the little measure of human life, may not be borne by unsteady hands. I would have him remember that they are "silver cords," which, binding for a while the tangible with the intangible, may not be handled by profane or unskillful fingers.

Another requisite to success, to every man, is politeness. Real politeness is the spontaneous expression of the heart that continually says to all around it, "Peace on earth — good will to man." It is wholly unselfish—never seeking its own, but always another's good. There is much of sacrifice in it, but it is never conscious of the sacrifice it makes. It goes out in hearty good will to all, without stopping to count the cost. Real politeness, it is true, is not always polished. There are many rough diamonds in the world that only need the skill o the lapidary to make them shine. Like other virtues, though it must, to a certain extent, be "native and to the manor born," it is highly susceptible of cultivation. Society is both its school and teacher—in that, and from that, it learns its lessons —always appropriating only that which will assimilate, and rejecting everything foreign to its instinctive sense of right and propriety.

Politeness is often counterfeited, but you can always detect the spurious. It has only the semblance, and not the real "image and superscription" of the genuine. Can you distinguish affectation from artlessness of manner? Can you distinguish the gentleman from him who only wears the guise of one? Then can you discern between genuine politeness and that which is merely assumed. It will not be questioned for a moment, I think, that the physician has abundant opportunity for the exercise of this ennobling virtue—this indispensable characteristic of a true gentleman. It is the province of your calling to be mingling much with others. Always meet them with a pleasant recognition—have a kind word and a cheerful smile for all. Let your intercourse with your patients, in particular, be of the most affable kind. A word of encouragement has a magical effect upon the desponding sufferer. Let your very presence by their bedside be like balm. Let your advent to the sick chamber be like the coming of an angel, bringing good tidings and healing on its wings. Doubtless you will be sometimes placed under circumstances of great provocation, and you may find it difficult always to maintain that perfect equanimity of temper which is essential to true politeness. You may be strongly tempted to be impolite—nay, even morose. But guard well the issues of the heart, for "from the abundance of the heart the mouth speaketh."

Honesty of purpose and integrity in dealing are also requisite to true success. It is scarcely necessary, I presume, for me to do more than simply to announce this proposition, to receive your unqualified assent to it.

And yet, I am led, by observation, to think that there are some who do not regard these important characteristics as essential to success, so far, at least, as they are concerned in the acquisition of the material concomitants of life. Many, by their mode of dealing, do not seem to think that "honesty is the best policy," but that policy is better than honesty, provided it secure the end intended. And we will not deny that some men seem to succeed in furthering their temporal interests by no very rigid adherence to the old adage just mentioned. Even admitting this, however, I still submit, laying aside the question of moral obligation, that, after all, "honesty *is* the best policy." The experience of mankind demonstrates it. I still further submit that men have *characters* to form and maintain, which, regardless of all secular considerations, are of more real importance to them than the temporary possession of any or all of those things which "perish with the using"; and it occurs to me that honesty of purpose and integrity in dealing should enter largely into the formation of those characters. Wealth and power may not always follow upright dealing and honest intention. At the same time it should be remembered that the acquisition of either or both of these means of personal aggrandizement, is not the highest success. The formation of good and noble characters is infinitely higher; for, are not our characters imperishable? Are they not the only possessions that we carry with us when we go hence? And here it will not, perhaps, be inappropriate for me to digress for a moment, and urge upon you the importance of making the formation of your characters, not only in respect to honesty of purpose and integrity in dealing, but in all other essential virtues, the work, the great work of your lifetime.

Our characters, as we all know, receive their *chief* molding in the spring time of life. It has been said, indeed, that what a man's character is, at the age of twenty or twenty-five, it will continue to be for the remainder of his life, so far, at least, as its more prominent traits are concerned. And this, in most cases, is doubtless true. True it is, also, that, "as the Ethiopian can not change his skin, nor the leopard his spots," so it is impossible for a man ever, *radically*, to change those essential characteristics which stamp him with an individuality peculiarly his own, whereby, as certainly, as by his physical conformation, his identity may be recognized. And yet, even though it be, in one sense, true, that "the boy is father to the man," and that every man receives an indelible stamp from the signet of his Creator, it is also essentially true, that the character of every man is the growth of a lifetime; and therefore, so far as a man may be regarded as the architect of his own character, he should make that character the crowning work of his life. In respect to your profession, it is undoubtedly true that it is beset with many and peculiar temptations, and the formation of high and praiseworthy characters will require the exercise on your part, of the greatest moral courage. But remember this—temptations promptly resisted, lose, at length, their power to harm.

Superior intelligence is also requisite to success. Knowing this, I can not refrain from urging you to the highest possible attainments in your profession. Be not satisfied with the mere rudiments, not even with a respectful mediocrity of attainment. Would you stand above the general level? Let "Excelsior" be your motto. You must not forget that superiority, either in general scholarship, or professional knowledge, is not so easily attained in countries where books are cheap, and where the millions of white-winged messages of the press are scattered over the land, like leaves in Autumn, and with more wisdom inscribed upon them than upon the leaves, on which the Sibyls wrote their oracles. And would you have your profession still hold a high rank among the so-called "learned professions"? Remember, that in this country these professions occupy a position relatively lower in the scale of intelligence, and therefore, of power, than they do in countries where free schools and a free press—those peculiarly American blessings, are not enjoyed to the same extent. The equalizing tendencies of a general diffusion of knowledge, and of the means of its acquisition, are so powerful, that it is absolutely necessary that you apply yourselves with diligence, far above your fellows, if you would wish to be recognized as their superiors, either in general or professional intelligence.

This view of the case may, indeed, seem to imply that we have reached, in this country, a high degree of intelligence in every department. This is by no means true. It is only true that there is a greater general diffusion of knowledge. Unfortunately, there is, in this country, a great tendency to *superficiality* of acquirement. This does not obtain, however, from want of a due appreciation of the profoundest erudition, nor from entire indifference to the most thorough professional training. It arises, as it seems to me, from the fact that our country opens, in rapid succession, so many avenues to fortune and preferment, that men are impatient to enter them, and are unwilling to devote a sufficient time to make thorough preparation.

But, in spite of this tendency to superficiality, remember that you can not be shallow in your attainments without recognition. Your stature will be determined, and you will be allotted to your appropriate rank, accordingly. If, then, you would soar to no middle hight, in the scale of professional rank, let me urge you, by all that may be desirable to yourselves, personally, in that distinction, as well as by all that you may, thereby, hope to accomplish for the good of others, to apply yourselves with all the enthusiasm and earnestness that belong to your natures, or that may be wrought up within you.

A physician should be a thorough scholar, not only in the circle of knowledge properly embraced in his profession, but also in a wide range outside of it. But is it true that physicians, as a class, possess a high degree of literary culture or general scholarship? It has been said, indeed, that the medical profession embraces within its ranks, many whose acquirements are at the lowest possible standard, so meager, indeed, as scarcely to entitle them to recognition, by those who have labored diligently to attain to eminence, in the profession. This is doubtless true, to a great extent, of the other learned professions. But will you allow this stigma longer to rest upon your profession—a profession so noble, humane and useful? Let it then, be removed. Do you ask how it shall be done? Let it be done by the joint efforts of teacher and student, and let the teacher begin the work, as upon him rests the greater responsibility. The medical profession, in this regard, needs reform, and Medical Institutions must initiate it. And, if I may not be regarded as transcending my province in this connection, (and here the Class will understand that these remarks are addressed particularly to Medical Faculties), I would presume to suggest, that all medical students, as preparatory to matriculation in any medical school, should be required to pass a satisfactory examination in some general course of study, not directly connected with that of their profession. Why should Medical Colleges differ, in this respect, from other Institutions? It may be said, perhaps, that the study of medicine is a specialty, not connected, necessarily, with anything either preceding or following it. True—and yet, does it follow that, even though a man may have taken notes of the several topics discussed in a course or two of lectures, and can stand a passable questioning upon them, that he is prepared to go out and wear, honorably, the title of a professional gentleman? I am aware that the presumption is, that those who purpose to enter upon the study of medicine, are prepared to do so, by some general course of study, beforehand. But is it safe to presume upon the general scholarship and intelligence of all who seek admission to medical schools? The time was, doubtless, when medical students were fully prepared, by a sufficiently extensive course of classical study, at least, to enter upon the study of medical science, and understand its technicalities, without continual resort to the lexicon. But is this the case, at the present day? Is the vocabulary of medical science so far divested of its technical phraseology, that this pre-requisite qualification is not now demanded? I am seriously of the opinion that much profound ignorance of the real subjects of medical science, is concealed under the flippant use of a few medical terms which any school boy might soon commit to memory, and which, after all, are only calculated to make the uninitiated stare, in blank astonishment, at the apparent profundity of erudition thus displayed. Now, how shall this state of things be remedied? I have presumed to suggest a way, and I would here repeat it. Institute an examination, in some form, of all students who apply for admission to your schools. Is it impracticable? Try it—I think it is not. Those who are duly prepared for such an examination, would not fear the ordeal. Those who are not, and yet desire to receive a course of medical instruction, will not hesitate to make the required preparation. In this way, it occurs to me, the medical profession may not only be greatly elevated, but would thus be able to maintain, with some show of justice, the rank which it has assumed. Depend upon it, Medical Colleges are, in a very great measure, answerable for any censure that may be attached to them in this regard.

Medical professors are the proper parties to prescribe the standard of admission to the ranks of their profession. And it will not answer for them to frame any plausible excuses in the hope of evading this culpability. It will not do to say that the competition of rival Institutions almost necessarily leads to the matriculation and graduation of the greatest possible number of students, regardless of their attainments. It will not do to say that students and their friends bring to bear upon Medical Faculties, a pressure which it is difficult to resist. Let Medical Faculties, then, sternly refuse the honors of graduation to all those who do not master the entire course of study prescribed for them, and let that course not be a merely nominal one. Let all who are connected with medical schools, and who desire to see this profession elevated rather than degraded in the estimation of an enlightened community, see to it, that they do not allow any workmanship to pass from their hands that will shame its artificer. "I speak as unto wise men, judge ye."

Another requisite of success is a proper degree of patience. "Rome was not built in a day." This saying, old, almost, as the "Eternal City," herself, has not yet lost its appropriateness for illustrating the necessity of patience. Haste is a prominent characteristic of the American people. Our very soil seems favorable to the growth of mushrooms. Everything here is subjected to the hot-bed process of growth; and, if it can not endure the stimulus of such a process, it must die, for our people can not wait for it to grow—they are impatient—they can not wait for anything. They can not wait for the accumulation of wealth by the slow gatherings of ordinary profits. Rather than toil patiently up the hill of dilatory prosperity, they prefer to run the terrible gauntlet of speculation, even though their career terminate in pecuniary ruin. Nor can our people wait for *time*. Do they travel? They must always take the *first train*, and that must be the "*Lightning Express*"; and, even though the iron horse drag them along at a break-neck speed, they are eternally grumbling out something about "slow coaches," and inquiring of the conductor whether they have not about "*got there*"—to-wit, the point of their destination. "Young America" is always in a hurry—decidedly *fast*. Now this is not the more excellent way. There is that seemeth always in a hurry, yet never progresseth, and there is that seemeth slow, yet maketh haste. Time is required for the accomplishment of anything that may hope to endure. The little round of human life—our "three score years and ten"—seems too short, indeed, for the achievement of anything great or enduring; but with a wise husbanding of the hours that make up this narrow span, more may be done than might at first "enter into the heart of man to conceive." Possess your souls, then, with patience, and work on. Lay the foundation broad and deep, if you wish the superstructure to stand firm. Imitate the builders of the pyramids. Do not try to complete, in a trice, that which should be the work of years. Work for the ages. You have a duty to perform to the after-time of your own brief act of life. Even though you may not accomplish all that you desire, think that there are others coming after you, who will, perhaps, take up the little thread—be it woof or warp—which you have dropped, and weave the fabric you designed, beautifying its texture, it may be, with something from the coloring of their own imagination and thought. Work for posterity. Have our fathers wrought for us? So let us work for those who come after us. Let us imitate the pigmy builders of the mountains in the sea. They toil patiently on while the centuries elapse. Each short-lived worker comes and brings his little tribute and casts it down, and at length, behold, the coral island peers above the waters. If human life is one eternal round of the same or similar scenes and experiences, each generation enjoying, in its turn, its allotted portion, then, truly, there may be no wisdom in laboring for posterity. Each generation will provide for itself, and be neither wiser nor better than its fellow. But if this great Life of Humanity is moving on to some higher destiny, like a triumphal car, ever gathering new and richer trophies, as it moves down the pathway of time, then indeed, is it the duty of each successive generation, to look forward and toil, with patience, for the one to follow; and that, too, without envy of the lot of those who may live in the "good time coming," but with a strong desire, cheerfully to contribute its little mite to the glory of that golden age.

ART. II.—*Caffeine for Narcotic Poisons.* By I. J. M. Goss, M. D.

I was called to a child some six years of age, who was said to be laboring under fits. On my arrival, I found the child in a deep stupor, the respirations deep and rather stertorous, from which it soon aroused, and seemed very much frightened, pitching forward, seizing anything within its reach and holding it with great tenacity. These spells of alarm would last for ten or fifteen minutes, then it would lapse into a stupor again; so it had continued to do for several hours prior to my visit. I asked its mother if it had been where it could get to the Jamestown weed. She said not, but an older child said it had been where it was very plenty. I now was quite confident that it was poisoned with that weed, for, on examination of the eyes, I found the pupils very much dilated. I gave an emetic of Lobelia and Ipecacuanha, which discharged from the stomach a quantity of the bloom and leaves of the Datura Stramonium. I followed the emetic with a very strong infusion of green coffee. This soon removed every trace of the poisonous effects of the Stramonium; the child became calm, fell into a sound and healthful sleep, and remained so until the morning, when it awoke well and so remained.

Sometime after this, I was called to a negro child some two or three weeks old, which they rather suspicioned had been poisoned with Opium. The child lay in a deep stupor, from which it could not be aroused, the breathing stertorous, the eyes set in its head, showing only the lower part of the white of the eyes. I concurred in the opinion that the child was poisoned with opium; so I gave Tincture of Lobelia compound, until emesis was produced, but did not delay to give also the infusion of green coffee, as strong as I could get it; I had cold water, also, poured suddenly on the head, so as to shock the child as much as possible, which so aroused the nervous system that the emetic acted. I continued the coffee infusion, with cold to the head, which, in the course of two or three hours, relieved the brain, so the child was entirely awake. I now ordered small quantities of the coffee infusion to be given for awhile, which entirely subdued the narcotic effects of the Opium. The child is now well, and seems quite healthy. I was anxious to know certainly that I was correct in my diagnosis; so we searched the house, and found half of a vial of Paregoric, which an old negro woman had stolen from the house. As no one else had been in the cabin for some time, she was questioned, and acknowledged that she had given the child Paregoric to put it to sleep, as it was rather cross, but said she did not aim to injure it. I have not reported these cases because they are novel, but to further substantiate the fact, that Caffeine is an antidote to the narcotic poisons. And I recommend to all physicians to keep the pure Caffeine on hand, so as promptly to meet an emergency. This is what I intend to do, as poisoning is quite frequent, especially with some of the preparations of opium; for they are in the hands of all who are disposed to buy them, as they are kept by every merchant in town or country. Would Caffeine be as active in dispersing congestion of the brain in other instances as in this? If so, it would become an important agent. From the trials that I have given it, I am satisfied that it approaches as near a specific, in cases of narcotism, as quinia in periodicity. I have often been relieved of cephalaegia, particularly that form that was caused by cold feet, fasting, etc., by strong coffee. And when I am compelled to lose sleep, in the discharge of my professional duties, I find no agent so prompt and certain as coffee to keep me awake; this agent I have used for that purpose for seventeen years. I recommend it to all who may chance to meet with cases of narcotism; I am certain that it is entirely a reliable agent.

MULBERRY P. O., *Jackson Co.*, *Ga.*, *Jan.* 1860.

ADDENDUM, BY C. T. HART, M. D.

The treatment detailed in the foregoing remarks I fully indorse, and have had an opportunity of testing its worth in a case which recently came under my observation.

A short time since I was called, about 3 A.M., to see a patient in the lower part of the city, and found him laboring under symptoms of violent narcotic poisoning. Having no stomach-pump at hand, I immediately administered a powerful emetic. By frequent dashes of cold water, and by keeping the patient constantly in motion with the assistance of two strong men, I succeeded in arousing him sufficiently to permit the emetic to operate. After its action, a strong infusion of *unparched* coffee was freely given. The cold water and motion were continued; and after a time I had the satisfaction of pronouncing my patient out of danger.

I subsequently ascertained that he had swallowed nearly five grains of Morphine and two drachms each of the Tincture of Stramonium and Hyosciamus, with the intention of destroying himself.

ART. III.—*Ampelopsis Quinquefolia*, *or False Grape*, *sometimes called Black Creeper or Dropsy Vine.* By R. J. McCALL, Miss.

The above has long been known to the profession as an inefficient alterative and tonic, with slight astringent and expectorant properties, and has been used with a considerable degree of success in the treatment of old syphilitic and scrofulous affections.

My attention was first directed to it by Dr. L. Sawyers, of this State, who recommended it to me as a safe and sovereign remedy for Dropsies of all kinds. Since that time I have had frequent occasion to apply it in all kinds, and have always observed the most decidedly beneficial effects from its use, and in no case has it seemed to exert any deleterious influence.

Botanists inform us that the Ampelopsis grows abundantly throughout the United States, and is not unfrequently cultivated as an ornament. It is a vigorous climber, and grows wild in woods and old fields, where it frequently attains the hight of fifty feet on the bodies of old trees, upon which it supports itself by means of tendrils not unlike roots. In the same manner it ascends and supports itself upon walls or frame work until it completely covers them—its large quinate leaves forming a luxuriant foliage of dark glossy green. It blooms in July, and ripens its berries in September and October. Care should be taken in collecting it not to confound it with the poison oak or rhus toxicodendron, which is sometimes found growing upon the same tree—the foliage and tendrils of the latter thoroughly intermingled with those of the Ampelopsis. The Ampelopsis differs from all other vines in having five leaves upon each leaf-stock.

Its Effects upon the System.—The Ampelopsis seems rather to stimulate absorption and the elimination of matter through all of the outlets of the system, than to act upon any particular secretion, though by some it is considered actively diuretic. In the cases in which I have had occasion to give it, there has been no perceptible increase of any one function over another, but generally a rapid diminution of the dropsical swelling, incident to what appeared to be only a moderately increased activity of all the excretory organs.

The bark of the vine is the medicinal portion, and should always be gathered fresh, when you expect to use it in the form of infusion, as I directed in an article some three years ago. In that article I directed it to be put up in the shade and dried, then pulverized and put up in tight jars; but from experience I find that when the bark becomes dry, it loses all its virtues. The bark yields a mucilage to water, similar to slippery elm, and may be told from the poison oak by testing it in water. I know of no vine that has any mucilage in the bark except the Ampelopsis. It may grow up the same tree with the poison oak, but there is this difference: the poison oak has long limbs, whilst the Ampelopsis has limbs from four to eight inches long, and seem to be in bunches. Some of the vines have but little mucilage, while others have a large quantity. I directed, in my first article, to use it in infusion, but since that time I have found that it yields its mucilage to whisky or brandy, and I have been using it in the form of a tincture for two years and find it answers a better purpose than in water. I have no particular formula for it, as it is a harmless remedy and one that may be given in large or small doses. I give from one pint to one quart of the infusion per day, or more if the patient wishes water. I let him drink it in place of the water.

When I am called to treat a case of dropsy, I give an emetic of Lobelia and Composition; then I keep the bowels open with Podophyllin in minute doses. I then take:—

200 grs. Cayenne Pepper,
100 " Golden Seal,
100 " Unicorn Root.

Make into pills, and give one pill every hour, day after day; and at the same time commence on the Tincture of Ampelopsis, in table-spoonful doses, from four to six times per day. My watchword, in treating dropsy, is to keep up a determination to the surface, and the bowels free. Repeat the emetic every fourth day.

I wish others to report their experience. I have given this remedy in some 25 or 30 cases, and it has served every time to run off the water. I also find it a good remedy in diseases of the kidneys, and in two cases of the "whites," it effected a speedy cure, when all the usual remedies had failed.

Art. IV.—*Metrorrhagia.* By J. G. Rich, M.D., Phila.

1st. "In your experience, has metrorrhagia, during pregnancy, always produced abortion?"

Not always—on an average, about one case in every three.

2d. "What is your treatment when it occurs during utero-gestation?"

Oil of Erigeron, followed by tonics, as Iron, etc. Quiet and rest.

3d. "Have you ever employed the Oil of Erigeron? If you have, explain its *modus operandi.*"

I have used it extensively for the last four years, in the treatment of uterine hemorrhage, and have not had it to fail in a single instance, though in some cases I have had to repeat the dose much oftener than in others; but as a general thing, one or two doses produce the desired effect. Its *modus operandi*, I am not able to explain satisfactorily, though I have no doubt but what it exerts a SPECIFIC influence over the uterine vessels, calling off, as it were, for the time being, the flow of blood to that organ, or, by its astringent properties, arresting, by contracting the coats of the vessels, the hemorrhage, the oil acting specifically. This explanation is very unsatisfactory to myself, and I would like to have your opinion.

My method of administering the oil is as follows:—(This is Prof. Sites' prescription.)

℞.—Oil of Erigeron, gtts. x.
Alcohol, f ʒ i.
Aqua Font. ℥i. M.

This constitutes one dose. Repeat, every ten or fifteen minutes, until the discharge is arrested. I have not had this prescription to fail me in a single instance. The *Oil of Fire-weed*, *which is frequently sold* for Oil of Erigeron, as far as my experience extends, is *worthless*, in metrorrhagia.

Professor Joseph Sites authorizes me to state, in reply to your first question,—

That in a large majority of cases of metrorrhagia, occurring during pregnancy, abortion does not follow.

To the 2d—He places implicit confidence in the Oil of Erigeron.

To the 3d—He has used, (and in fact was the first to use, in this city,) the Oil of Erigeron, for seven years; and, where the article has been pure and genuine, he has not known it to fail in arresting uterine hemorrhage in a single instance.

He further states, that it is frequently adulterated, and Oil of Fire-weed sold for it; under these circumstances, it is not so reliable. Its *modus operandi*, he does not profess to understand; nor are his explanations satisfactory to himself, though he deems its action specific, and considers the Erigeron as much a specific for uterine hemorrhage as Quinine is for intermittent fever.

By W. O. McCullough, M. D., Butler Co., Ohio.

In my experience, metrorrhagia has always produced abortion. My treatment depends much on circumstances—the severity of the attack, period of gestation, etc. My general plan is, to strictly require the patient to remain quiet, lie on her back with pelvis elevated, hot applications to the hands and feet, cold to the abdomen, the tampon and Oil of Erigeron in ten to fifteen drops every fifteen minutes, with one to two grains of Geranin, and, as a drink, a decoction of the Piper Angustifolium or Matico. I continue these until the hemorrhage is arrested, and then open the bowels with enemas and the Comp. Powd. of Jalap and Bitartrate of Potash.

During the past year I have employed the Oil of Erigeron in two cases, in conjunction with the remedies detailed above, with perfect success. Previously I used it in a case of hemorrhage from the lungs, without success. I gave it in three-drop doses every hour, and think the failure due to the small doses used. It should be given in doses of at least ten drops every fifteen minutes. In that quantity, it is a prompt and efficient remedy. I can never consent to do without it in my practice. I omitted to say, I always bandage as soon as possible.

By Geo. Covert, M. D., Clinton, Wis.

In my experience, Metrorrhagia has not always produced abortion. My treatment has been, to place the patient in a horizontal position, and give Dovers powders, when there was much pain or irritation. As astringents, I have used Geranin and Tannin, burnt Alum and Nutmeg; but the most successful remedies were, Mur. Tinct. of Iron, in fifteen-drop doses, as often as the urgency of the case demanded; or the following:—

℞.—Ess. Cinnamon, ʒ iv.
Oil of Fire-weed, ʒ i.
Simple Syrup, ℥ i. M.

A teaspoonful every fifteen minutes, gradually lengthening the intervals as the hemorrhage declined. In addition, I apply cloths, wet in vinegar and water, to the hypogastric regions. After hemorrhage ceases, if there is irritation of the womb, I use Caulophyllin and Cypripedin.

By T. Oldshue, M. D., Pittsburgh.

In my experience, Metrorrhagia, during pregnancy, has not always produced abortion. I can only call to mind, at this moment, but three cases of the kind, however, in my practice.

Case 1.—Mrs. ——, aged 30, was pregnant with her third child. Hemorrhage was quite excessive in the third month of utero-gestation, and again in the sixth month. Both "floodings" were unaccompanied with pain, or at least the pains were but trifling.

The treatment during the hemorrhage was, Geranin in two-grain doses every hour, and one ounce of Beth-root, to one pint of boiling water; half a teacupful every fifteen minutes, until hemorrhage was checked. Enjoined quietude, and bandage around lower bowels.

After the hemorrhage ceased each time, the treatment was followed by the use of the following bitters:—

℞.—Aralia Racemosa.
Symphytum Officinale, *aa* ℥ iss.
Trillium Pendulum, ℥ i. Mix.

Add half a pint of boiling water, and, when cool, one quart of best Port Wine. Dose—half a wine-glassful, three times a day.

Case 2.—The second case was similar to the above, excepting there was but one spell of the hemorrhage.

Treatment the same.

Case 3.—The third case, I have on hand at the present time. Mrs. ——, aged 33. Hemorrhage occurred in the third month, and now again, at the end of two months from the last, making it, as is supposed, in the fifth month of utero-gestation. The hemorrhage is now checked, and she is under the use of the above bitters. How the case will terminate, remains to be determined.

In the foregoing, you have my answers both to the 1st and 2d questions.

Respecting the 3d question, I would say, that I have not employed the Oil of Erigeron in a sufficient number of cases, perhaps, to justify an opinion, much less to explain its *modus operandi*. In three or four cases, in which I tried it, the remedy *seemed* to "act almost like a charm," checking the hemorrhage in an incredibly short time; whilst in an equal number of cases, it appeared to have no effect whatever. I have used it only in uterine hemorrhage. In those cases in which it seemed to succeed so well—if the sudden cessation of the hemorrhage was to be attributed to that agent at all—it would appear to me to be by the sedative influence it exerted over the circulation, or upon the heart and arteries. One of the patients said she felt its effects in the ends of the fingers in one minute after taking it; another became dizzy; another felt strangely. Now, in those cases in which it did not succeed in checking the hemorrhage, no such feelings were expressed, excepting in one case, the patient expressing a feeling of numbness after its use for some time.

I forgot to mention, that two of the cases in which the uterine hemorrhage was not checked by the Oil of Erigeron, were cases of abortion. The hemorrhage may have been continued, because of some portion of the placenta being retained, preventing a complete closure of the vessels thereby.

By M. H. Lynn, M. D., Marissa, Ill.

Agreeable to your request, in the Feb. No. of the Journal, I herewith present a report of two cases of metrorrhagia, occurring during utero-gestation.

Case 1.—Twenty-first week of gestation.

May 30.—Found the patient complaining of pain in the back and region of the womb, more severe, particularly at night. Previous health very good. Prescribed,

R.—Caulophyllin, grs. x.
Scutellarin, grs. xii.
Pulvis Doverii, grs. xx. M.

Divide into four powders. Take one every three hours.

June 4.—The administration of the medicine was followed by a complete relief from all pain until last night, after retiring to rest, when severe pain was experienced, of the same character as at first, but continuing only a short time. This morning felt well, but after breakfast was taken "unwell." Explained to her, that this being "unwell" was not the catamenia, and she must have rest, and take the recumbent position, else bad consequences would follow. This advice, however, was not regarded. Prescribed,

℞.—Geranin, grs. xiv.
Pulvis Doverii, grs. xvi.
Scutellarin, grs. xii. M.

Divide into four powders, and take one every three hours.

Heard nothing further from the patient until June 13th. I then learned that the hemorrhage had ceased entirely shortly after the exhibition of the last prescription, and no inconvenience had been experienced until three days since, whilst attending to household duties, the membranes were ruptured. No pain present. An examination, per vaginam, revealed a prolapse of the chord and displacement of the child. Was not able fully to determine the presenting part. As the bowels were constipated, ordered the administration of the Comp. Powder of Sen. and Jal., and took my leave. Returned in four hours; the bowels had been moved twice; one or two slight pains had been felt. Upon examination, found a pelvic presentation left sacro-cotyloid position. Delivery was accomplished in four hours.

Case 2.—Twentieth week of gestation. The husband of the lady applied to me, Dec. 18th, saying that on former occasions she had miscarried, and was now fearful of such a result. Had been unwell for several days, but apprehended no danger of this kind until to-day, when slight hemorrhage came on. Enjoyed absolute rest. Prescribed,

℞.—Caulophyllin, grs. viii.
Geranin, grs. xvi.
Pulvis Doverii, grs. xviii. M.

Divide into four powders, and give one every two hours.

Hemorrhage ceased shortly after the administration of the medicine. Continues well up to this time.

By W. F. Welsh, M. D., Ohio.

Metrorrhagia, during utero-gestation, has always, in my experience, produced abortion, sooner or later.

The Oil of Erigeron, I am in the habit of using, and consider it almost a specific in such cases, with verat. veride to control the circulation; morphia, if necessary, mild cathartics and cold packs. After the hemorrhage ceases, I give tonics, as quinine, etc., if the patient requires it.

I will report one case. Last fall I was called to a lady about thirty years of age. I found her with low, quick pulse, profuse hemorrhage from the uterus, and extremities cold. I gave Oil of Erigeron, in doses of ten minims, every twenty minutes. After the second dose, the hemorrhage ceased. I ordered five drops of veratrum every hour, a mild cathartic to be taken the next morning, and left five quinine powders, one to be given morning, noon and night. One month subsequently, I was called to the same patient, and found her in labor. In two hours she was delivered of a six-month fœtus. I would remark, that in hemorrhage subsequent to delivery, I prefer a decoction of Ergot to the Oil of Erigeron, on account of its contractile power.

PART SECOND.

SELECTIONS.

On Lithodialysis. By V. Kletzinsky. (Translated from the "Zeitschrift fur pract. Heilkunde," by T. L. A. Greve, M. D.

Besides the mechanical removal of Calculi or Concretions by operative interference, as by incision, extraction or lithotripsy, the necessity for a lithodialytic method has always manifested itself, I might almost say, in the form of a vague presentiment—a method to reach the concretions by means of proper chemical agencies at the place of their formation, there to dissolve them and deliver them in a state of solution, to the ordinary excretory ducts. This method, which represents more a theoretical than a practical system, deserves to be drawn before the forum of science, and to be judged in its chemical and mechanical relations. Its adjudication in the former aspect, is the object of the present communication.

The concretions of the human organism may be divided into urinary, biliary, intestinal, venous and glandular calculi. The methods of lithodialysis are three in number: 1. That by injection of proper solvents into the vessels, where the concretions are formed. 2. The electric dialysis, i. e., the injection of indifferent solutions, from which the acid and basic menstrua of the calculi are to be developed by means of powerful galvanic currents, at the time and place of their application, so that they may be used and neutralized as fast as they are set free, without injuring the tissues of the organ. 3. The urophanic lithodialysis, which aims at dissolving the concretions on the basis of resorption and secretion, by agents which transude from the blood, and are excreted unchanged.

After the classification of calculi with reference to their locality and the division of lithodialysis with reference to its methods and agents, it remains to arrange the concretions, according to their composition, that we may be able, after acquiring a knowledge of the materials to be dissolved, to select and determine the chemical conditions of the solvents or menstrua to be employed. For this purpose, we have to take all organic and inorganic compounds, which may form concretions in the human organism, through a critical review, when the chemical criticism of the lithodialytic methods will naturally follow.

1. *Uric Acid and Its Salts.*—Free uric acid, which is nearly insoluble, the very difficultly soluble biurates and insoluble urate of lime, occur in three kinds of concretions—in venal, in vesical, and in arthritic calculi. Their chemical solvents are the caustic alkalies and the alkaline carbonates, tribasic phosphates and borates. Of course, only vesical calculi are accessible to lithodialitic injections and electrolysis, while venal and arthritic concretions can only be reached by urophanic lithodialysis. The great irritability of the bladder precludes, however, the use of the most powerful of the above-named solvents, especially of the alkalies, and even of their carbonates, at least in concentrated solutions. Injections are therefore limited to the same unirritating class of agents as urophanic lithodialysis, and hence the latter method must be preferred, since it dispenses with mechanical operations. In electrolysis we would, in nearly all cases, make use of chloride of sodium or nitrate of potassa, which, under the influence of the electric current, would be decomposed into acid and base, as any other salt, so that the free base, appearing at the negative pole, would, at the moment of its liberation, immediately be used to dissolve the calculus without injuring the mucous membrane of the bladder. We do not doubt the possibility of a compendious electrode-apparatus, which, similar to a lithotriptic instrument, might be introduced into the bladder and there unfolded, so as to properly clasp the calculus and subject it to the electrolytic influence; but even if all acological difficulties were successfully overcome, we do not see what should be done with that part of the decomposed salt, not used for dissolving the stone, in the present instance, with the nitric or hydrochloric acid, which, if the process were continued for some time, would

hardly remain indifferent toward the bladder. It is conceivable that this free acid might be used to immediately decompose again the solution of the urate of the alkali, as it diffused itself from the negative pole, so as to form chloride of sodium or nitrate of potassa, and to precipitate the uric acid in a state of fine division, in which, although insoluble in water, it would not form solid concretions, but a fine magma, which, mixed with the menstruum or the urine, could be evacuated without difficulty, either spontaneously or by catheterisation. But even admitting that, by the simultaneous use of borax, this inconvenience, of a second precipitation of the uric acid, might be entirely or partially overcome, still another serious obstacle to the successful operation of electrolysis presents itself, making its practical utility altogether questionable. An extensive examination of a large collection of urinary calculi, sent to me for analysis, by Dr. Pollock, physician to the Shah at Teheran, has taught me that the electrolysis of these concretions progresses so slowly that the complete solution of an ordinary sized calculus would, under the most favorable circumstances, require more than a hundred sittings of one hour each, so that the difficulties of this seemingly convenient method, even admitting its problematic practicability, would far exceed those of lithotripsy.

Injections are of great value in the formation of secondary incrustations, from decomposed ammoniacal urine in the irritated catarrhal bladder; but here, where they afford the greatest therapeutic advantage, they lose entirely their chemical lithodialytic character, for only tepid water is used, which is repeatedly thrown into the diseased bladder and soon evacuated again by a catheter. Their action in this case does not consist in dissolving the calculus, but in soothing and cleansing the bladder, and in removing the ferment-like mucus, together with the precipitated sedimentary powder of urates and phosphates, so that their cementing and hardening to new secondary incrustations may be prevented and the decomposition of the urine, the retro-active cause of catarrh, be retarded. After we have thus shown lithodialysis by means of injection, and electrolysis to be practically useless and ineffectual on uric acid concretions, we have to examine the urophanic method, which, of course, embraces also the removal of renal and arthritic calculi. The use of alkaline mineral waters, of soda water, of tribasic phosphate and carbonate of soda, of fruits and vegetables rich in alkaline salts, but especially of tartarus boraxatus (a double salt composed of bitartrate of potassa and biborate of soda, G.), are the most powerful eliminative measures resorted to in this method. These agents also act but very slowly, and it may be truly asserted, that one of those dense hard uric acid culculi of ordinary size, will perhaps never be really dissolved by them; but, on the other hand, it is equally true that, for the correction of the diathesis, for the solution and removal of small primary nuclei in the kidneys, and for the resorption and involution of arthritic nodules, and hence for the cure of arthritis, depending on the presence of uric acid, we have no other rational treatment but the one under consideration.

2. *Xanthine, xanthic oxide.*—We have no statistical experience regarding the lithodialytic relations of xanthin, as it occurs but rarely, but the chemistry of this body presents to us the most unfavorable conditions. As it is soluble only in strong acids or caustic alkalies, it can be removed neither by injections nor by the urophanic method, since free acids and alkalies can not transude from the blood. We have already expressed our opinion on electrolysis, when speaking of uric acid concretions, and as in its employment the same means are always and exclusively used, whatever may be the material of the concretion to be dissolved, we do not deem it necessary to refer to it again.

3. *Cystin, cystic oxide.*—This substance also is but rarely found in calculi, although much more frequently than xanthin; it is soluble in alkalies, and would therefore require the same chemiatric treatment of urophanic lithodialysis, as uric acid; but here we are likewise entirely without statistical data.

4. *Urostealith.*—Urestealith was discovered by Heller, and afterward found and examined by Moor; it dissolves readily in the carbonates of the alkalies, and is therefore, like uric acid, accessible to urophanic lithodialysis, to which, if we mistake not, Heller even owed its discovery.

5. *Oxalates, oxalate of lime.*—Oxalate of lime forms two kinds of urinary calculi, and occurs in man exclusively in urolithiasis. Its acid, the oxalic, may be formed by an anomalous process of digestion and assimilation of food, which, while deficient in plastic material, is rich in carbo-hydrates [$C_6 H_6 O_6$ (hydrated lactic acid, as a product of the digestion of carbohydrates,) $+O_9 = 3 HO, 3 (C_2 H O_4)$]. In this case, it forms the exaluria of badly-fed children, and in conjunction with phosphatic sediments, the urolithiasis and arthritis of indigence; oxalic acid may however also be produced in consequence of lessened energy of oxidation, as a product of the decomposition of uric acid in the formation of urea; in this case it forms the oxaluric acid concretions and sediments, and assists, together with the uric acid diathesis, to constitute the arthritis of affluence. As oxalate of lime is soluble only in tolerably concentrated mineral acids and is not readily decomposed, neither injections nor external remedies will sufficiently affect it; the science of to-day knows of no agents which could

be recommended for the solution of oxalic acid concretions with any prospect of success.

6. *Phosphates.*—The phosphate of lime and the ammonio-magnesian phosphate occur very frequently in primary and secondary layers of calculi, inside as well as outside of the uropoetic system, mixed with—

7. *Carbonates*, especially with carbonate of lime, together with which they form also intestinal and atheromatous concretions. Since they require the same solvents, i. e., diluted acids, they may be considered together here. Simple as it appears, to dissolve bone-earth or chalk, as they are completely soluble even in dilute vinegar or lactic acid, it is impossible for science to name a menstruum capable of dissolving these concretions in the organism; for dilute acids, when taken internally, do not even reach the lower intestines, where the enteric juice retains its alkaline reaction, and hence have no effect even on intestinal calculi, much less can they pass through the alkaline blood unchanged and free into the tissues and excretory ducts and appear in the saliva, the tears, and the urine. We will therefore never be able to dissolve phleboliths, intestinal salivary or lachrymal concretions, by the internal use of dilute acids. Chemistry knows of no better advice than, based upon its investigations on the change of matter, urgently to recommend the avoidance of vegetable food and carbo-hydrates, and the use of fats and an animal diet, of which it is known that it favors the acescency of the secretions and transudations, in a manner not yet chemically investigated, while a vegetable diet induces or increases their alkalescency. In cases where the location of the concretion and the irritability of the organ will permit, injections of weak, diluted acids may, however, be used with some success. But it is evident that the applicability and utility of injections for the solution of calculi will always be limited and subordinate.

8. *Fibrin.*—Clots of fibrin may sometimes induce the formation of concretions by favoring the precipitation of difficultly soluble salts, and thus become incrusted with them. Fibrin by itself would dissolve with comparative facility in a solution of borax and saltpeter. But we are hardly ever called upon to act upon it in that condition, as it is generally already incrusted with one or more of the substances, forming the concretion; the removal of which would therefore have to precede the dialysis of the fibrin. It will hardly be necessary to remark, that saltpeter and borax, two completely indifferent neutral salts, are as applicable for injections as for internal administration, since they are easily absorbed, pass into the secretions and transudations, and when moderately diluted do not irritate mucous membranes.

9. *Biliphein-lime*—Biliphein-lime as well as solidified-bile

may cause the formation of gall-stones, but neither of them requires special solvents, as they are both partly soluble in water and partly miscible with it, so that biliphein-lime by itself probably never forms hard concretions, unless—

10. *Cholesterin*, the bile-lipoid, unites with it, which, being very crystallizable, insoluble in water and disposed to arrange itself in concentric layers, forms not only gall-stones with or without biliphein-lime, but also constitutes, with the phosphates and carbonates of lime and magnesia, atheromatous tumors. Alcohol, fats, ethereal oils and soaps are the most powerful solvents of this lipoid, and as the oils favor also the peristaltic motion of the bile-duct, they are the best remedies for the rational treatment of gall-stones.

11. *Carbon-stones*—The coaly mass, of which it is said (even by Berzelius), gall-stones have, in a few cases, been found to consist, is, as its name would lead us to suppose, incapable of dialysis, as carbon is characterized by its complete insolubility in all menstrua.

If we now, after this review of the concretions and their solvents, sum up our opinions on lithodialysis, they will be found somewhat unfavorable, and may be stated as follows:—

1. Electrolysis is, notwithstanding the bold ingenuity of its fundamental idea, probably a chirurgical abortion which has, for the present at least, no practical importance.

2. The method of injection, besides being locally only applicable, where lithotripsy also may be resorted to, shares with the latter, the restrictions by the irritability of the organs, and is excelled by it, in quickness and efficacy, to such an extent, that it can in no wise compete with it, in surgical practice.

3. Referring, lastly, to the urophanic method of lithodialysis, i. e., the removal of concretions by chemical solvents, which are resorbed and pass from the blood into the secretions and excretions, we recognize it as an important and indispensable means of cure for arthritis and its sequelæ, when depending on the presence of uric acid, but this is the only disease in which it is applicable. It is far superior to the mechanical operations for its extraction and trituration, and in the present state of science we must acknowledge, that a lithodialysis, i. e., a method of chemically dissolving the concretions, which could dispense with or supersede operative assistance, does not exist.

PLATE I.

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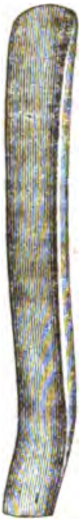

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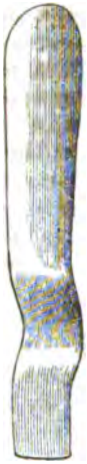

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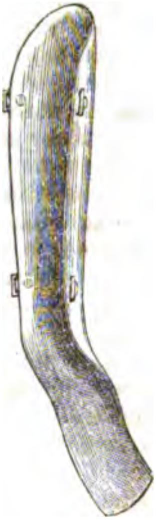

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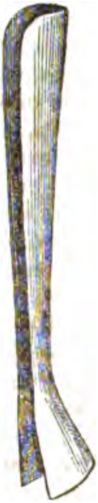

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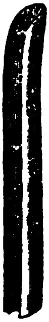

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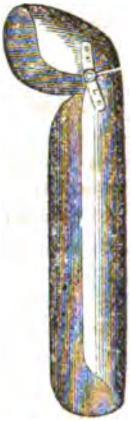

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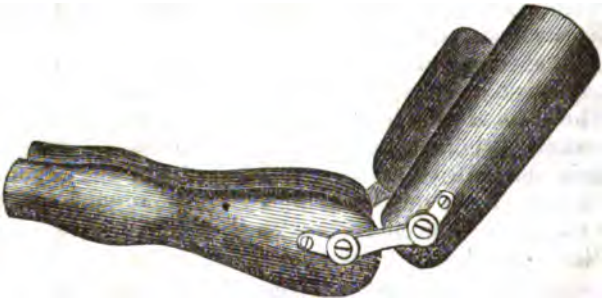

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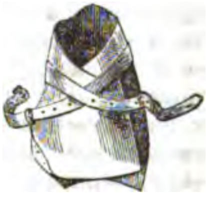

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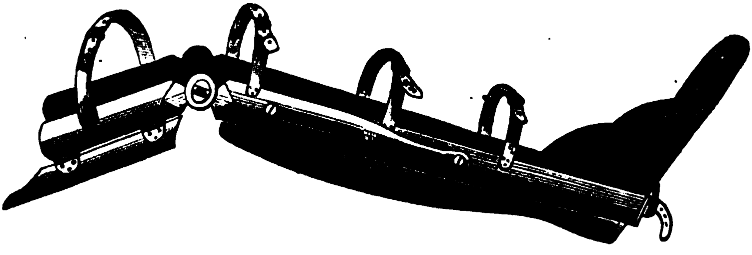

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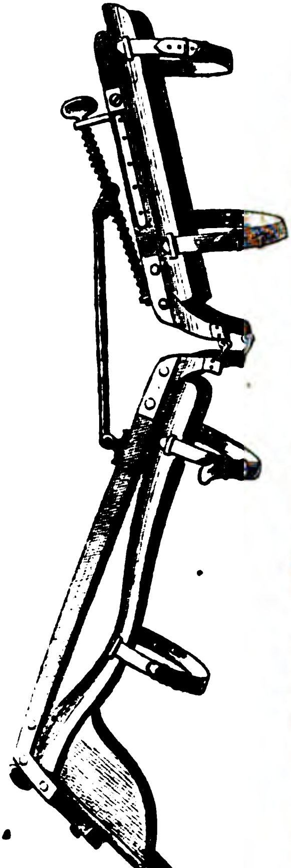

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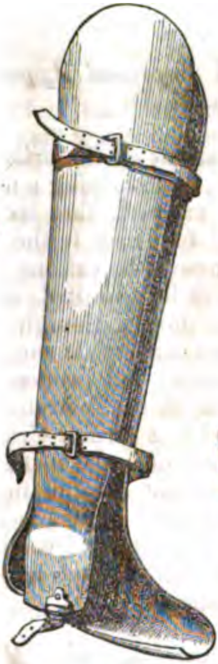

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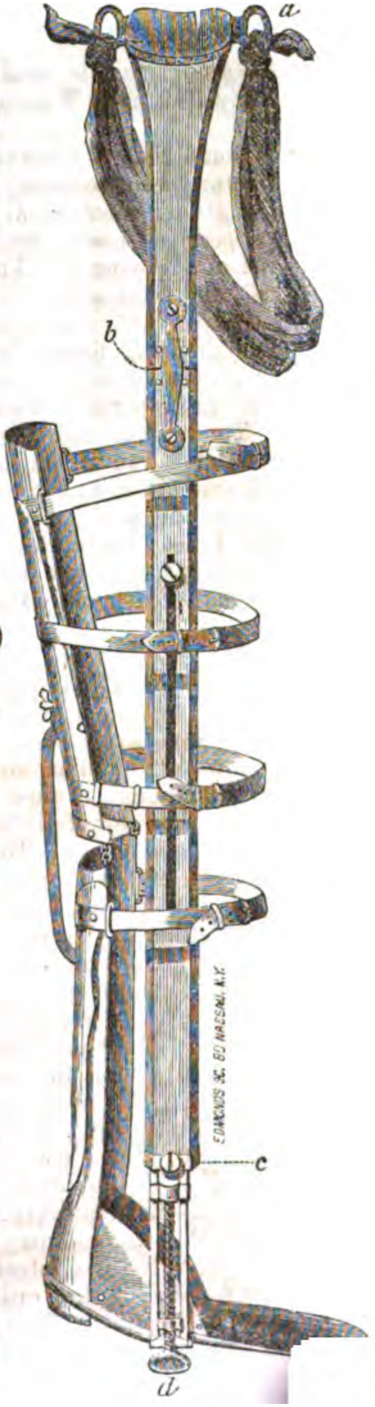

PLATE II.

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Surgeons' Splints, and Improved Apparatus for Fractures.
By Benjamin Welch, M. D.

Some general observations on the principles of treatment in fracture seem necessary, in describing a new form of apparatus for giving mechanical support, that its advantages may be properly estimated, and to direct to the most successful manner of applying it. These observations being entirely practical, and the result, it will be admitted, of not very limited experience, will not, it is hoped, though appearing in the not very inviting form of an advertisement, be found altogether unworthy of consideration, independently of the apparatus they are especially intended to illustrate.

The opinion expressed in a former Circular, that some more available, convenient, and effectual means of giving mechanical support in this important class of injuries, and for maintaining the position of injured or diseased parts, than any before in use, was a desideratum, and would be appreciated by the profession, has been confirmed; and my anticipations of encouragement fully realized.

On Mechanical Support of the Muscles implicated in Fractures.—The importance of giving support to the Muscles in the treatment of Fractures, to me appears to have been strangely disregarded. This subject was cursorily alluded to in a former circular, and I propose now to give it more extended, though it must still be limited, consideration.

Absolute rest of all the muscles giving motion to a fractured bone is demanded. To procure this, the natural longitudinal support, afforded by the bones, in a suitable position of the limb, it is known, is necessary. Their contractile power is excited either by over-extension, or when natural support is withdrawn. Uniform lateral support is no less important, and uniform compression impairs or overcomes the contractile tendency, while unequal pressure is a source of irritation, and excites it. Much has been said and written in relation to the *position* giving the most equal support to the muscles, and, therefore, the most favorable for replacing the bones, and maintaining rest; comparatively, very little has been said, and apparently little notice has been taken of the effect of compression, or the lateral support of the muscles, although its influence in subduing contractile power, as a physiological fact, is well known, and may be turned to much practical advantage. Incidentally some lateral support, much even, may be given to the muscles by the ordinary process of bandaging with cushions and splints. This, however, has been applied chiefly with to prevent swelling, and as a covering by which the irritation of splints is avoided, and to confine the dressings to the limb, rather than for any other object. The late Prof. Nathan Smith, of New-Haven, directed that in all cases the splints should enclose one half of the circumference of the fractured limb, while the other half was supported by a bandage. This was, however, with a view to the advantage of a broad surface to give support to the bones, and maintaining coaptation. Similar advantages result from the use of the Gum, Starch, or Dextrine bandages, at one time so popular, and which, in fact, under favorable circumstances, and when skillfully applied, have performed remarkable cures. Notwithstanding all this, the necessity of lateral support of the muscles, with a view to preventing contraction, and to prevent misplacement of the bones, or shortening of the limb, or the spasms, often so troublesome, is nowhere once alluded to in any system of Surgery which with I am acquainted; on the contrary, dressing is often recommended, and practiced, without any lateral support of the muscles whatever.

As examples of this mode of dressing, I will first mention Fractures of the Femur, a single bone, supporting the entire weight of the body in all its movements, surrounded by the most powerful muscles, and where shortening of the limb is the admitted rule, and perfect cures the exception, which is often treated both in hospital and private practice only by the long side-splint, extending from the axilla, along the side and limb, beyond the foot, for maintaining extension, and the support of the bed on which it rests, in an unchangeable position, prescribed by the surgeon. Prof. W. Gibson recommends the treating of this injury by two long splints, one upon each side of the body, with a cross-piece beyond the feet, to which the feet are confined, for making extension, without the slightest dressing applied to the thigh. (See *Gibson's Surgery*, vol. 1, p. 445.) Or the same injury is treated by elevating both feet upon an inclined plane, extending from the hips beyond the feet, with a foot-piece, to which the feet are confined for making extension, and no dressing applied to the thigh, (see p. 450.) James L. Van Ingen's Method, as reported by Prof. Hamilton, in the last volume of Transactions of the American Medical Association, consists in converting the whole bed, upon which the patient rests, into an inclined plane, by elevating the lower bedposts upon small blocks or bricks, and maintaining extension by confining the foot of the fractured limb to a cross-piece, extending between the posts, and the thigh, only supported by cushions underneath. In various contrivances for permanent extension in fractures of the leg, we find the same total neglect of lateral support to the muscles. With proper dressing, in fractures of the leg, permanent extension is certainly seldom, and, we believe, *never* required.

The late Prof. Dudley, of Transylvania University, Kentucky, was the first, and, so far as I am acquainted, is still, the only writer who has given this subject the prominence it demands. He, with the enthusiasm of a *reformer*, goes so far as to recommend, in the treatment of compound fractures, complicated by extensive lacerations, and gun-shot wounds, to trust solely to the position and the omnipotence of the bandage, of which he has been justly *denominated* "the hero." He tells us not only "*all contraction, but all susceptibility to muscular action is effectually suspended*, by a sheath or case of properly prepared canvas."

It is many times recommended to delay the dressing of fractures for several days, placing the limb in an easy position, as it is called, upon a pillow, and enjoining rest, until inflammation has subsided; because the pressure of the bandage and splints is supposed to increase it. This is another instance in which the principle we are considering is disregarded; and is nothing less than to delay the most efficient remedy, both of pain and inflammation, until the most urgent necessity for it is removed. Proper support is a direct means of preventing both inflammation and pain; and if it is delayed under the mistaken idea of avoiding irritation, and, as described by Liston, "no efficient means are employed to prevent the spasmodic action of the muscles, the startings of the limb, the jerkings of the broken ends, and the displacement of the fragments, then, assuredly, in spite of all local and general measures, there will arise frightful swelling, pain, tension, and heat; the inter-muscular tissue will be gorged with blood, and the circulation of the limb roused to a dangerous and alarming degree."

Pain and Spasm attending Fractures.—*Pain* or *spasm*, beyond what necessarily attends the injury to the soft parts, is not a necessary condition of the union of fractures. Healthy bone itself is perfectly insensible, and is no more sensible than the soft parts during the process of healing, unless inflamed, when it becomes most exquisitely sensible and painful. In fractures of the superior extremity we seldom hear more complaint than would be expected from the manifest inflammation and injury to the soft parts, without spasm or twitching of the muscles, obviously because the fragments of bone are not allowed to rub upon or irritate each other. But not so in fractures of the leg and thigh. The greater weight of the parts to be supported, and the means of support employed altogether more inadequate, and the restraint imposed upon the patient being more severe and more imperfectly complied with, and in addition to all this, the dressings such as are used often being unskillfully applied, we should expect involuntary twitchings of the muscles would be excited by the constant irritation—that sleep would be disturbed, and its approach regarded with terror in consequence of the spasms, which only await its approach—that, finally, inflammation of the bone itself would be excited, as well as in the surrounding soft parts, so that we should have irritation, fever, pain, such as inflammation of bone only can produce. All this, as an abstract proposition and physiological fact, is well known by the intelligent practitioner, but greatly at variance with popular notions in relation to fractures; and practically, surgeons, I fear, will not be ready, in all cases, to stand manfully to the test, and attribute the pain and spasmodic twitching of the limbs of their patients to their own defective or unskillful dressing.

Union of Fractures.—The union of fracture of the bones is the result of the laws of health—healthy action developed in the recuperative power of the animal economy—strong in proportion as the vital powers are vigorous and healthy, weak in proportion as they are feeble or disordered.

It hence follows that all the appliances of art must be wholly powerless in any degree to promote or accelerate the process any further than we can remove hindrances to the development of healthy action.

Thus far I shall not be disputed; yet the principle seems to be too much lost sight of and neglected in practice. As the obvious effects of this tendency of nature, we have a certain amount of inflammatory action, accompanied by some increase of heat, pain, and swelling of the soft parts. If these fail, the process is interrupted or retarded. On the other hand, these symptoms being in excess, instead of a secretion at first fluid, then fleshy and vascular, then ligamentous and flexible, and finally unyielding bone, we have the common results of high inflammatory excitement, great swelling and pain, and it may be, the formation of pus and extensive suppuration or gangrene of the part. Hence indiscriminate flooding by wet applications, and by cold, or unnecessarily encumbering the parts, and increasing heat by a multitude of cushions and bandages, can not but be highly injurious and censurable.

Another point to which I especially wish to draw attention: as the process is a natural one, so also nature has established a period for the accomplishment of her purposes, which must, while the laws of the animal economy remain the same, remain unalterable. We do not, therefore, expect to expedite the process beyond what is already known as the period of health. On the contrary, by the perfection of our instruments, we may even retard union; and not unfrequently the most perfect cure is rather slow in its accomplishment. Let there be some imperfection in the adjustment of the bones—let there be some irritation in consequence of imperfect support of the parts, there will be an exuberant and rapid growth of callous—a large ridge may be formed around the place of fracture, it becomes quickly solid, and the patient has the use of his limb, it may be somewhat deformed, but still quickly restored.

Bearing these principles in mind, we are at no loss in accounting for an admitted fact, that bones of the superior extremity usually heal much more rapidly than those of the inferior; for there is less of absolute restraint, less to impair the energies of healthy action, and all the processes of health are more fully sustained. The ribs when fractured, though never at rest, heal with remarkable rapidity. So also with the bones of animals. The animal limping and deformed, yet the bones solid and healed in a remarkably short space of time. The very obvious import of this is an important practical lesson; that is, in all cases, allow as much motion and general exercise as is consistent with the paramount objects of exact coaptation of the bones, and safety as regards the reproduction of the fracture.

Un-united or Tardy Union of Fractures.—This apparatus, on account of its lightness, and being accurately fitted to the limb, is peculiarly adapted to Amesbury's method of promoting union by compression in both the lateral and longitudinal direction of the bones, by which absorption of the perhaps superabundant soft and yielding substance which has accumulated between the fragments of bone is promoted, a degree of healthy action excited, and soon bony matter deposited, and finally solid union produced.

Such, I can confidently assert, from repeated trials, will be the result in most of what may be termed, recent cases. I believe very few if any cases of not more than ninety days duration, will be found to resist this method of treatment. I have met with none. Perhaps not the least efficacious part of the treatment consists in allowing a very considerable amount of bodily exercise, without endangering a reproduction of the fracture.

The system has become debilitated by long confinement,—vascular action in the affected limb is especially weak,—when suffered to remain in a depending position it becomes livid,—when blood is pressed from the capillaries by the finger, it is slow in returning; but by resuming, as the patient may now be allowed to do, some general exercise, such as hopping on crutches, riding, or if no more than sitting up and removing from the bed to the chair, with friction, showering, stimulating lotions, etc., to the limb, health improves, circulation becomes more vigorous, the bones evidently become more unyielding, and soon union is complete.

Conditions other than Fractures requiring Splints.—These are sprains, inflamed joints, rheumatism and wounds, either incised, contused, or lacerated, extending to muscles, tendons, or joints. To describe all these cases particularly, would exceed my limits, and is not necessary. These splints are well adapted to all such cases, and there can be no doubt that the advantages of mechanical support have been strangely overlooked, since motion and the separation of divided parts are in all cases the principal obstacles to union.

In cellular and muscular structures, this especially holds true—*perfect apposition or contact, and perfect rest, in the healthy constitution, are the only conditions required for union by first intention.* If means to diminish inflammatory action are required, as washes or wet applications, it is because there exists partial disorganization in consequence of contusions, or too much heat is excited by improper dressings or other applications, or excessive general excitement or feverish action exists in the system.

Incised wounds of the knee or other joints, which are justly regarded with terror, and are in a high degree dangerous if neglected, heal with the same, or perhaps I should say almost the same certainty as wounds of other parts, if the conditions above stated are strictly complied with.

B. Welch,
Lakeville (Salisbury), Conn., Feb. 1, 1858.

Apparatus Described.—The splints consist of light and elastic cases or coverings, formed of very thin strata or layers of wood or "cut veneers," cemented together by interlayers of gutta percha, of such thickness as is required to maintain their form, and pressed into the form of the part for which they are designed. By this method of constructing splints, the fibers of the wood all run longitudinally or parallel with the surface, which gives them great superiority to splints carved from solid blocks of wood, however skillfully performed and fitted to the part; for when so thin as to be elastic, they are necessarily liable to split and break, and do not retain their form when wet.

Gutta Percha used by itself, was at one time supposed to constitute the *ne plus ultra* as a dressing for fractures, on account of its perfect plasticity and strength, and resistance to the action of fluids; but experience soon demonstrated that it had not sufficient firmness at the temperature of the body, to resist the pressure to which it was exposed.

This may be introduced in any proportion required to give strength and durability and resistance to the action of fluids, and, when properly applied, it adheres with more firmness to the wood, than the fibers of the wood do to themselves. Another circumstance attending this arrangement of considerable practical importance is, that the splints are made more flexible and elastic in the lateral or parallel direction of the fibers of the wood than in the longitudinal; hence, what may seem somewhat paradoxical, they readily accommodate themselves to changes in the dimensions of the limb, resulting from increase or diminution of inflammation, or from interstitial absorption, while they give perfect support to the injured or diseased part. When necessary to adapt them to limbs of individuals differing in the form and size of their limbs, they are made sufficiently flexible by immersion in hot water, or simply enveloping the splint, or such portions of it as may be necessary, in cloths wetted with hot water for a few minutes, and then, on cooling, they will immediately become unyielding and elastic as before. This peculiarity can scarcely be too highly appreciated, for of all the materials heretofore proposed capable of being molded to the part and hardening after the splints are applied, none has been found which has not proved decidedly defective in practice. They possess great strength and durability, so that the same splint may be used a long time, and for the treatment of many cases of fracture. They do not preclude the use of evaporating lotions, water-dressings, or moisture in any manner applied, except when heated much above the temperature of the body. They are applied with great facility, rendering the dressings simple and easy to both surgeon and patient, and allow constant access to the injured part, to detect inflammation at its commencement, or any irregularity in the position of the bones; and after the tendency to inflammation has subsided, dressing or examination by the surgeon is required much less frequently than when ordinary splints are used. In short, they have, combined with the property of being made sufficiently soft and yielding to be molded, with accuracy, to the surface of the part for which they are designed, all the properties of insolubility, lightness, elasticity, strength and firmness, necessary to constitute a *perfect splint.*

In connection with the above splints is apparatus for maintaining permanent extension in fractures of the thigh, and for fixing the joints of both the superior and inferior extremities in the extended position, or at any degree of the flexion of the limb required. These will be described with the consideration of particular injuries.

The entire apparatus is made with especial reference to allaying the tedium of confinement consequent to fractures, by allowing changes of position and exercise not inconsistent with the perfect quiet of the particular muscles implicated in the injury, and allowing such removals as circumstances often imperiously demand, as when persons are injured at a distance from their homes; and this will not be found so inconsistent with the greatest success in the treatment as has been generally supposed, for the more complete the support given, and the more perfectly the action of the muscles is suppressed, the greater may be the amount of general exercise without deranging the fracture.

EXPLANATION OF THE PLATES.

Plate I.—*Splints for the Superior Extremity.*

Fig. 1. "Forearm Splint—(Dorsal)."
For the dorsal side of the Forearm.
Fig. 2. "Forearm Splint—(Palmar)."
For the palmar side of the Forearm.
Fig. 3. Wrist Splint.
For fracture of the Radius near the wrist, or dislocation of the Ulna at the inferior extremity, or both combined. For the same injuries may be substituted the splint represented—
Fig. 4. "Ulnar Splint."
Fitted to the ulnar side of the Forearm.
Fig. 5. "Straight Hollow Splints for the Arm," of several sizes.
Fig. 6. "Elbow Splints." For Fractures near the Elbow. "These splints are fitted to the two sides of the arm and connected at the elbow by double hinges, which fix the arm at any degree of flexion or extension required, and the position may be changed by turning the screw which serves also as a pivot for the hinge. The hinges may be easily transferred to splints of different sizes."
Fig. 7. "*Shoulder Splint* adapted to the top of the shoulder and outside of the arm. The joint is required to accommodate the cap or upper portion of the splint to the different positions of the shoulder."
(See Transactions of the American Medical Association, Vol. 9, p. 230.)
Fig. 8. Adjustable Side Frame for Fractures of the Leg.
"This may be flexed or extended, and fixed in the position required, by the hinges. This is done by means of pinion-like teeth at the circumference of the hinges, which are held in contact or separated, by screws, forming the pivots of the joints. It is fitted to limbs differing in length by sliding joints at the sides of the limb, and in the splint, which supports the underside of the limb. The depth is increased or diminished by turning the screw at the bottom of the foot-piece. Flexible side-splints are confined by a bandage to the sides of the limb; another may be placed on the top of the thigh to support the thigh straps."
Fig. 9. A form of Gaiter for making extension in fractures of the thigh.

PLATE II.—*Splints for the Inferior Extremity. Leg Splints.*

Fig. 1. Fitted to the inside of the leg.

Fig. 2. Fitted to the outside of the leg.

Fig. 3. Straight hollow splints of different lengths, for different sides of the thigh.

Fig. 4. "Splints for fractures near the ankle-joint."

Fig. 5. Adjustable double inclined plane for fractures of the leg. This is a modification of Amesbury's Splint for fractures of the leg, with Roe's improvement in the method of making the splint adjustable to different sized limbs, which consists in having several splints of different sizes fitted to the under side of the limb, which can be connected to the main splint or removed as required, by means of sliding joints or screws. It is here further improved by an original form of hinge corresponding with the knee in which the center of motion in the splint, when flexed or extended, corresponds with that of the knee, and the limb can be flexed or extended with little or no change in the relative length of the splint. The splint can also be made longer or shorter to correspond with limbs of different lengths, or to make extension in dressing by turning the screw at the heel; this does not make any projection of the splint beyond the foot. The brace for fixing the knee at the angle required, is regulated, as delineated in the plate, by a screw parallel with the thigh-piece, or by a vertical screw and slide, as in Amesbury's Splint. The former has the advantage of making flexion and extension by a more gradual and uniform motion, when only slight motion can be allowed in consequence of inflammation or injury of the joint.

Fig. 6. "Thigh Apparatus."

a. "Upper extremity, broad and well cushioned so as to rest easily over against the side of the body. The breadth of this portion of the splint assists also in preventing its rotation. It is furnished with rings for the perineai band."

b. Brace for fixing a joint; to be used only in packing.

c. Screw for adjusting a sliding joint, for the purpose of lengthening or shortening the splint.

d. Thumb-screw for making extension.

The hollow splints, represented below, can be moved upon each other by a joint opposite the ham, and their position secured by a movable bar. They may also be lengthened or shortened. There is a joint corresponding to the heel, and another opposite the sole of the foot.

"The apparatus may be used as a double-inclined plane, or as a straight splint. Lateral splints (fig. 3) accompany the apparatus, all of which are made of gutta percha, veneered with wood. They are molded and flexible."—*Transactions of American Medical Association, Vol.* 10, *p.* 432.

GENERAL DIRECTIONS FOR THE APPLICATION OF THE SPLINTS.

The Splints, if not perfectly adapted to the surface, are first immersed in water as hot as can be borne by the hand, until they are sufficiently flexible; or if more convenient, and only portions need be changed in form, envelope either the entire splint, or such portions as may be necessary, in cloth wet with hot water. If water, at or near the boiling temperature, be used, some care is requisite that it is not continued so long as to completely melt the gutta percha, so as to separate the layers of veneers. Then a cloth, or, if preferred, a very thin cushion of cotton batting, is laid on the splints, and they are fixed upon the limb by a bandage. For a bandage, I usually prefer the roller, which is applied with more ease and uniformity, and gives better support to the muscles than the bandage of strips or Scultet's bandage. This is first bound upon the limb from the inferior portion of it upward, the splints are then applied, and secured by the roller passed downward over the splints. If it is afterward desired to convert this into Scultet's bandage, as it may be, especially the portion of it which comes in immediate contact with the limb, divide the alternate turns with scissors at convenient distances, and they may easily be drawn to suitable positions on the limb.

A still lighter and an effectual method of confining the splints, is by four or five tapes or straps passed through perforations or loops at the two sides of one of the splints, then doubled back, and tied or buckled over the loose splint. The splints being secured in this way, the bandage *over* the splint may be altogether omitted. Simple as this method of securing is, it is a valuable improvement, entirely preventing the sliding of the straps in any direction upon the splints, or any change in the position of the splints upon the limb. The straps for securing splints should never be allowed to pass around the limb, unless immovably attached to one of the splints.

APPLICATION TO PARTICULAR FRACTURES AND INJURIES.

Fracture of the Forearm.—For Fractures of the Radius, or Ulna, or both those bones together, the apparatus required is—

1. The Forearm Splints, palmar and dorsal.
2. Compresses, to be applied along the interosseous space.
3. The Roller.

After adjusting the bones, first apply the compresses to compress the muscles between the bones; then the roller, previously moistened, from the roots of the finger to the elbow; after this, the splints; then complete the dressing by passing the roller downward to the ends of the fingers. Or the method of securing the splints by tape or straps, as above described, may be adopted, then the bandage over the splints may be entirely omitted.

This method of dressing fractures of the forearm is at once simple, easy, light, and effectual in all cases, except where the fracture is seated very near the joints, either of the elbow or wrist; then, different methods of maintaining the position of the bones are required.

Fracture of the Radius near the Wrist, and Fracture with Dislocation of the small Head of the Ulna.—Next to the common form of fracture of the forearm, near the middle of the bones, the treatment of which is so simple and satisfactory, we are immediately met by one of the greatest annoyances in the entire range of fractures, being accidents of frequent occurrence, and annoying to the patient, because unavoidably painful, slow in recovering, the fingers and wrist remaining a long time stiff, and rotation of the hand difficult or permanently impaired, and sometimes, also, resulting in permanent deformity of the joint; and annoying to the surgeon, because it is difficult to persuade the patient that an injury so trifling in appearance is necessarily attended with consequences so serious.

Simple fracture of the radius at the lower extremity near the wrist, as it usually appears, when resulting from falls upon the hand, with projection of the inferior portion on the back of the wrist, and corresponding projection of the superior portion anteriorly, can only be mistaken for dislocation of the wrist backward. If such a mistake occurs, and the case is relinquished after reduction, without mechanical support, the displacement quickly returns, and the deformity is as unsightly as before. A careful examination will enable the surgeon to easily discriminate the injuries. In fracture, rotation is particularly painful, and the displacement is increased by pressing the radius with the thumb in the palmar direction, while we rotate the hand outward. The precise point of the displacement may be more accurately detected by flexion and extension of the hand. Too much reliance must not be placed on the absence of crepitation, as this symptom can only be produced by forcible extension with rotation of the hand, and, sometimes, not even then. It will usually be perceived at the time of replacing the fracture, and other attempts to produce it only occasion unnecessary pain. There are cases of this accident with only slight displacement, which, in the swollen condition of the parts, can not be detected. The principal characteristic is, then, painful rotation, with the pain referred to this portion of the bone; but, guided by this circumstance alone, subsequent developments will not often show the surgeon at fault in his diagnosis.

The difficulty in the treatment of this injury is greatly increased when complicated by either fracture or dislocation of the ulna, but especially by dislocation. Dislocation of the head of the ulna, from the radius, may occur also without fracture of the radius, but the fracture is much more commonly present. All these different forms of injuries are usually produced by the same cause, that is, falls upon the hand, and require essentially the same form of mechanical support for their treatment. The dislocation, whether complicated or simple, is known by the absence of the prominence on the outside of the wrist caused by the small head of the ulna, with a corresponding projection in the palmar direction, the head of the ulna lying nearly on a level with the os-pisiforme. This is the direction of the dislocation, at least in all the cases I have witnessed. When reduced, there is always great liability to displacement, owing to the small and superficial articulating surface of the radius. When there is also fracture of the radius, the tendency to displacement is increased by the strong action of the muscles of the forearm, and the difficulty of binding the head of the radius to the ulna without compressing the superior fragment so far into the interrosseous space as to prevent rotation of the forearm, and occasion very considerable deformity of the wrist. In the worst forms of the accident there is much injury of the soft parts, followed by high inflammation and severe pain, which wholly preclude efficient bandaging until the inflammation has subsided. I have, in repeated instances, witnessed this form of injury occurring, to a greater or less extent, in both the wrists at the same time, by persons who, in falling from a hight, and naturally projecting the arms to save themselves, have received the principal force of the fall upon the hands.

The treatment of these accidents is, it appears to me, but imperfectly considered in the books. Boyer remarks, concerning fracture of the radius near the wrist, that "There is always, in this case, a considerable swelling of the adjacent articulation, and afterward more or less difficulty in its movements;" and in complicated fracture, "As we can not foresee the period when we can apply the apparatus, and as at this time the bones may have united in an unnatural position, it is proper to advise the patient of the probable loss or difficulty in the action of pronation and supination."

So far as the difficulty in these cases arises from the difficulty of retaining the bones in their proper position, it may, I think, in all cases, be overcome, provided the necessary applications are made speedily after the injury is inflicted, before inflammatory action has commenced, and the patient will exercise any tolerable share of submission to the restraints imposed upon him.

The indications are, first, to secure absolute rest of the part, with the thumb pointing upward. 2. The ulna being regarded as the fixed point of support, the inferior portion of the radius is to be constantly and forcibly impelled toward it. 3. The head of the radius and hand, strongly abducted, are to be retained in their proper position in relation to the shaft of the bone.

The first and second of these indications may be fulfilled by means of what I have denomniated the ulnar splint (Pl. 1, fig. 4). To simplify somewhat the dressing in these cases, we have constructed a single splint, in which is combined nearly the form of both the ulnar and palmar splints, fitted to the palmar and ulnar sides of the forearm, with the hand strongly abducted, making a more convenient, and, perhaps, equally efficient mode of dressing. After replacing the bones and wrist, apply a sufficient compress along the ulna; after this, what I have called the wrist splint (Pl. 1, fig. 3) upon the palmar side of the arm, and the usual dorsal splint to the dorsal side of it, and secure these by straps or tapes, as described (*page* 229). The bandage may then be continued downward over the whole to the fingers; or the ulnar splint, (Pl. 1, fig. 4). The splint being properly softened by immersion in warm water, and a narrow compress placed upon the ulna, extending to the small head of the bone, the arm is placed upon the splint, and secured by a roller, and the principal force being applied to the hand while the roller is loosely applied over the radius, the interosseous space is increased rather than diminished, and the radius held firmly pressed upon the ulna. We have now accomplished just what is done in all analogous injuries; for example, by the splint of Dupuytren in fracture of the fibula, with dislocation of the ankle outward, or fracture of the inner malleolus of the tibia, with dislocation inward; just what we practice in fractures of the condyles of the femur or humerus. Resistance is made upon the sound side of the limb, and the displaced part is impelled toward it. What reason can be assigned for a departure from these principles in the case before us? This much being accomplished, the palmar and dorsal forearm splints are applied, and the remaining portion of the bandage continued down upon the arm to the ends of the fingers, and the dressing is completed. It is an improvement to bandage each finger separately, to prevent swelling, before commencing dressing the arm. I can assert the complete success of this method of treatment in numerous cases, and without any failure, where the prescribed directions have been complied with.

The rigidity of the tendons and stiffness of the fingers which harrass the patient for so long a period after this injury, may be diminished, by early resorting to passive motion and frequent dressings, with frictions during convalescence.

Fractures of the Elbow-Joint.—This comprehensive and rather indefinite title is chosen because all the injuries included by it are treated by the same form of apparatus, viz.: the hollow-jointed elbow-splints. (See Plate 1, fig. 6.)

These splints are adapted to the two sides of the arm, are capable of any desired change in regard to flexion or extension, are readily adapted to limbs differing in size or length, giving complete support to the joint, and thereby preventing all motion or displacement of parts; they are at once convenient and effectual, and the intention is so fully accomplished, by means so entirely simple, that there seems to be little room for more to be expected or desired.

Fractures of the Inferior Extremity of the Humerus.—Whether the fracture is oblique, separating either the internal or external condyle, or transverse, including both, or, if with the last, as occasionally happens, a longitudinal fissure, extending from the transverse, through the cavities for receiving the olecranon and coronoid processes to the joint, separates both the condyles; in either case, the apparatus consists of: 1. The hollow-jointed splints for the outer and inner sides of the arm. 2. A compress and one or more rollers of sufficient length to extend from the hand to the shoulder, including the necessary turns about the elbow, and then from the shoulder to the hand, including the splints. 3. If the fracture is transverse, with projection of the detached portion backward, resembling dislocation of the elbow in that direction, a light narrow splint to extend from the point of the olecranon nearly to the shoulder.

Manner of Dressing.—This consists in first bending the arm, and when the fracture is transverse, drawing it downward and forward to effect a replacement of the bones: then applying the splint to the back side of the arm, and extending to the olecranon, with a proper compress resting upon the point of the bone. The arm is then held by an assistant, while the surgeon applies the roller from the roots of the fingers to the shoulder, making several turns around the elbow. Then the side splints, fixed at the required angle, are placed on the sides of the limb, and the dressing is completed by continuing the bandage downward from the shoulder to the hand. If the condyles are fractured obliquely, with displacement of the forearm, either outward or inward, first place a compress on the round side of the limb, extending to the elbow; then place the arm on the Splint fixed at the proper angle, and these being held by an assistant, the roller is applied from the fingers to the shoulder; then the other splint is applied, and the roller continued downward again to the hand. Lotions should be applied to prevent or reduce inflammation.

After the first week or ten days, changes should be made in the position of the arm at every dressing. These should be more or less extensive, according to the amount of inflammation existing at the time. The arm may, in this way, be gradually brought to the extended position, and then again to the flexed, and, by this means, the liability either to deformity or anchylosis is prevented.

Fracture of the Olecranon.—Apparatus required.—1. The jointed elbow-splint fitted to the outside of the arm. 2. Three rollers, one to be expended on the forearm with a few turns about the elbow—the second to be passed from the top of the shoulder of the injured arm around the body under the opposite arm, to prevent the bandage slipping down; it is then continued from the top of the shoulder to the elbow. The last is used to confine the arm upon the splint. 3. A compress and flexible hollow splint fitted to the back side of the arm. 4. Adhesive straps, one and a half inches or more in width, and twelve or more in length.

Method of procedure.—Extend the forearm, bring down the detached olecranon process in close contact with the ulna, and retain it in this position by the adhesive straps, one on each side of the arm, passing spirally and crossing immediafely above the olecranon, and thence down upon the sides of the forearm, drawing downward the detached portion of bone, to be held in this position by an assistant, while the surgeon applies the first bandage from the roots of the finger to the elbow; the compress and flexible splint are then applied over the triceps and supporting the extremity of the olecranon, and then the second bandage is applied. After this the jointed splint is placed upon the arm, fixed in the extended position, and confined by the third roller, extending from the fingers to the shoulder.

As this injury is usually produced by direct falls upon the elbow, and attended with considerable contusion, it may be necessary for the inflammation resulting from this to subside before the apparatus can be efficiently applied. An obvious necessity exists for the splint on the back of the arm. The insertion of the tendon of the triceps muscle into the olecranon is such as to leave a considerable space at this point between the humerus and tendon; consequently, pressure directly upon the tendon must force it too closely inward, and by tilting the superior portion of the fractured bone upon the humerus, throw outward and separate the lower portion from its attachment to the ulna, leaving too great a space for bony union to be accomplished. Hence, in this fracture, we almost uniformly have only ligamentous union with some separation between the fragments, and "owing to this, the arm long remains weak, and sometimes never recovers its former strength."—(Prof. Gibson.)

Fractures of the Middle or Body of the Humerus.—The treatment of these easily managed fractures, which seldom result in deformity, scarcely needs explanation. Two splints (Pl. 1, fig. 5) may be applied to the back and foreside of the arm, and both secured in the usual manner by a roller; then two similar splints may be applied to the outer and inner sides of the arm, and in like manner secured upon it by the bandage.

Fractures of the Neck of the Humerus.—This fracture, though not difficult to manage, is but little benefited by ordinary splints, which, owing to the form of the part and shortness of the detached fragment of bone, can give but little support. The splints always project, giving an unwieldy appearance to the dressings, and require the additional support of pasteboard, leather, or other flexible material.

The form of splint here recommended for this fracture is original, forms a neat and convenient dressing, and fixes the bone in its proper position with great security and firmness. It is represented Pl. 1, fig. 7. No directions are required for its application, except that one or more turns of the roller should be continued from the top of the injured shoulder around the body, under the opposite arm, to keep the dressings in place.

This form of splint is also well adapted to cases of delayed or non-union of fracture of the humerus. Here, it seems, the weight of the arm operating constantly to keep the portions of fractured bone separate, while the natural contractile tendency of the muscles is overcome by bandaging, and compresses over the muscles, acts as a cause of non-union of the bones. This is a cause of this unfortunate result, more frequent in this than any other bone of the body, which has not before been pointed out, but I am confident will prove the true one. With this splint it is easy to maintain constant support, or, if need be, compression, in the direction of the shaft of the bone. The shoulder-cap is confined upon the shoulder, and prevented from sliding outward by a band passing from rings upon the cap of the splint around the body under the opposite arm. The arm being flexed, another band, with a compress or pad, is placed under the elbow, and secured by hoops or rings at the lower end of the splint; and this may be drawn with any degree of firmness to give the necessary support. A bandage, of the form of the figure 8, may also be applied from the top of the shoulder of the injured arm, around under the elbow to the top of the shoulder, under the opposite arm, and again to the top of the shoulder; and this may be repeated two or three times. In no case may bandages be applied around the arm to confine it to the body except directly at the elbow. If higher on the arm, it operates as a fulcrum, over which the arm is liable to be bent at the seat of the fracture.

Fractures of the Inferior Extremity.—It will be convenient here, as in the consideration of apparatus for the superior extremity, to commence with the more simple, these being the inferior portions, first. It is not necessary here to make comparisons between the apparatus described and a multitude of very excellent forms which have from time to time appeared and had their day, and have then been superseded by others, or, as would now seem to be the tendency, by none at all. However others may regard the subject, I have no expectation that, in private practice at least, surgeons will often recommend to their patients, or that patients will be often found to submit to dole away their thirty, forty, or sixty days of absolute confinement in a prescribed position, without the relief of such changes of posture, and such movements of the body or limbs as can only be allowed where a good apparatus is used. With such help, experience has abundantly demonstrated that in many cases free motion, and, in some, almost unlimited exercise, may be safely allowed.

The Longitudinal Half-Boot.—For the introduction of this form of splint, we are indebted to the late Professor Nathan Smith, M. D., of Yale College. For all the important fractures of the leg, he required splints to be nicely carved from solid blocks of wood, to fit every particular case of fracture, which can only be well accomplished by an artist, at considerable expense; and the same splint will seldom serve for the treatment of more than a single case of fracture. This splint, and the mode of treatment adopted by Dr. Smith, are described in the American Medical Review, published at Philadelphia, A. D. 1825, vol. 2, p. 355. Splints of a similar form, constructed of wood and gutta percha, may be adapted to limbs differing largely in size, and either to the inside or outside of the limb, as the case may require, and will serve for the treatment of many cases of fracture.

They are adapted to all cases of fracture of the inferior third of the leg. In fractures of the fibula, or inner malleolus of the tibia, we apply the splint to the side of the limb opposite the fracture, with a compress extending from the ankle-joint upward, then applying a roller from the toes to the knee, the splint is secured to the leg, and the foot is forced in the direction opposite to the displacement. When both bones are fractured, the splint may in general be most conveniently applied to the outside of the limb.

We have substituted for this splint the form of splints represented in Plate 2, fig. 4, which is more easily constructed and fitted to the limb, and equally effectual in maintaining the position of the bones. This is a sufficient support for most of the fractures at the lower third of the leg. A roller is first applied from the toes to the knee, then the two splints to the two sides of the leg, protected by sufficient covering or padding upon the splints, and secured by straps passing through rings attached to the edges of one splint, and buckled over the opposite, as represented in the plate, and over these the bandage may be continued down again to the foot. If the fracture consists of fracture of the fibula, or internal condyle of the tibia, with dislocation of the ankle, a sufficient compress is applied to the sound side of the limb, extending as low as the joint, and secured by a bandge extending from the toes to the knee; then over the compress the splint, with foot-piece, to prevent motion of the ankle-joint, and the common leg-splints, figs. 1 or 2, to the opposite side; then these are secured by the straps and bandage, as before described, with sufficient turns of the bandage around the ankle to press the foot in the direction of the foot-piece of the splint.

Improved Apparatus for Fractures of the Leg.—These fractures may all be well and conveniently treated by either form of apparatus represented Plate 1, fig. 8, and Plate 2, fig. 5, and flexible side-splints, represented Plate 2, figs. 1 and 2. Both differ from any of the forms now in common use: Firstly, in the arrangement of the joint for the knee, by which flexion and extension of the limb may be performed without changing the relative length of the splint and the fractured bone. This is effected by a joint at the side, instead of under the knee, and as high on the limb as the center of motion of the joint, giving a more extended motion opposite, corresponding to the ball and socket. This alone is of sufficient importance to give the apparatus a decided advantage over all others in which this circumstance is disregarded. To illustrate the absurdity of attaching the joint, in the ordinary manner, under the knee, we have only to place a common jointed measuring rule under the limb, with the limb flexed to a right angle, then extend the limb and the rule together, and it will be found that the relative length of the limb below the knee and the rule will have changed from one to two inches. The neglect of attention to this circumstance is, I do not doubt, often the cause of displacement of the bones, and shortening of the limb. Secondly, in fig. 8, the screw which serves as a pivot for the joint, also fixes the joint in the position required, by means of pinion-like teeth at the circumference. Hence we avoid the inconvenience of a projecting rod or screw under the knee, which is employed in all other forms of apparatus extending to the thigh, that have come under my observation. Thirdly, the sliding joints for adapting the apparatus to limbs differing in length, are, in one, placed under the limb, in the other at the sides, avoiding the encumbrance of a projection beyond the foot. Fourthly, the method of attaching the foot-piece to the main support, by which the depth of the instrument may be increased or diminished, and the foot raised or depressed, and by which also the different portions of the apparatus are connected, giving it firmness and strength without increasing the weight, are also original. All these improvements, as well as the material of which the flexible portions are constructed, I consider, give to both these forms of apparatus a sufficiently distinctive character to be designated as new and improved.

In all cases where the fracture of the bones is situated above the middle of the leg, the support should extend to the thigh, and be capable of fixing the joint, though occasional changes in the position should be allowed.

The method of dressing is simple and easy. The limb having been prepared by the reduction of displacements or coaptation of the fractured bones, a roller is passed from the toes to the knee. The side-splints, softened by hot water, are then adjusted to the limb, and secured by the bandage continued down again to the foot. The limb is now placed on the frame, slightly cushioned with cotton or folds of cloth to receive it, when it is secured in the proper position by the screw at the side of the foot-piece and the side-straps, and the joint at the knee is also fixed at the degree of flexion required. At a subsequent dressing, the bandage, or either portion of it, if preferred, can be converted, as before described, into a bandage of strips.

Improved Apparatus for Fractures of the Thigh.—The apparatus for the thigh, possesses all the advantages which have been shown to distinguish the apparatus for the leg, and is adapted either to the flexed or extended positions of the limb, as the practitioner may prefer, or the circumstances of the case may require. The ability to change the position of the limb, I regard, in some circumstances, as essential to success, and the only possible means of avoiding very serious deformity. This is true of some cases of fracture below the neck of the femur, but near the hip, and also of some cases of oblique fracture, near the knee. It is also important to be able to flex or extend the joints to some extent after union of the fracture is accomplished, during the period of convalescence. We may thereby very much diminish the protracted stiffness caused by fractures near the joints, when kept constantly in the extended position.

Directions for Dressing Fractures of the Femur.—If, as is now frequently practised, adhesive straps are used for making permanent extension, the straps prepared with tapes or loop-holes at the lower extremity, by which they may be secured to the foot-piece of the apparatus, are applied, extending from near the knee, or near to a level with the bottom of the foot. A roller is now applied, commencing with the foot, and extending upward nearly to the fracture. Another bandage is secured by a few turns about the pelvis, and after proper adjustment and coaptation of the bones, is continued downward upon the thigh, connecting by a few turns with the first-mentioned bandage. Flexible splints of wood and gutta percha are now applied to the sides and top of the thigh, of the length of the thigh, and secured by the remaining turns of the bandage. A sufficient cushion of cotton or cloth being placed upon the double-inclined plane or bed-splint, the limb is placed upon it, and the necessary extension made by means of the counter-extending perineal band and adhesive straps or gaiter, or both, as may be preferred; the whole is then secured by straps passing around the limb, and a band around the pelvis.

BUSINESS NOTE.

The Apparatus and Splints, here described, are manufactured by Welch, Seymour & Co., Lakeville, Litchfield county, Conn.; and the Splints being secured by Letters Patent of the United States, can be obtained only of them, or agents supplied by them. All orders, accompanied by a remittance, will be promptly attended to, and on the most reasonable terms.

Lakeville, Conn.

PART THIRD.

CLINICAL REPORTS.

Newton's Clinical Institute.—Spring Session of 1859-'60. Services of Profs. NEWTON and FREEMAN.

REPORTED BY JAS. A. HENSHALL, M. D.

CASE 610. March 11. JAMES SCOTT, aged 40. *Chronic Laryngitis.*—This patient is a Vegetarian, he having abstained from meat, and lived upon vegetable diet alone, for the past six years. About six months ago—when quite weak and debilitated from overworking himself, and from the non-nutritious character of his diet—he took a cold from a sudden change of the weather, which continued to grow worse, and finally left him in his present condition. He now has a constant cough, which is worse during the morning; he expectorates a great deal of thick, yellowish sputa, which if he can not spit out easily, the effort causes vomiting; he is very hoarse, not being able to speak above a whisper; uvula elongated, and considerable irritation of the pharynx and fauces; there seems to be much ulceration of the larynx, which is very sore upon pressure; the chordæ vocales are relaxed, and clogged with the tenacious secretion of the mucous membrane of the larynx; has had palpitation of the heart for two years, which is caused by the slightest exertion; appetite rather good; pulse 110, and feeble.

Treatment.—Advise him to use a nourishing diet of meats, etc., with moderate exercise.

℞.—Comp. Syr. Helianthus, ℥ viij.
Comp. Syr. Stillingia, ʒ ij.
Tinc. Capsicum, ʒ ij. M.

Take two teaspoonsful, four or five times a day.

Apply Ol. Tiglii over the throat, night and morning; also, apply a towel, wrung out of cold water, around the throat, upon going to bed at night.

March 18.—Is not so hoarse; can now speak so as to be heard at some distance; cough much relieved; not so much irritation of fauces; feels stronger. Continue treatment.

March 25.—Voice still improving, and pulse stronger; otherwise no perceptible change. Will now direct the following treatment to be observed:—

℞.—Syr. Prunus Virg., Comp. Syr. Stillingia, *aa* ℥ ij.
Tinc. Capsicum, ℥ ij. M.

Take a teaspoonful, four times a day.

[An application of a solution of Nitrate of Silver was here made to the mucous membrane of the larynx, by means of a probang.]

April 8.—Says he has felt better during the last few days, than he has for several years; larynx not so sore upon pressure; can now speak so as to be heard quite distinctly across the room. Continue treatment, and make the application of Nitrate of Silver, every alternate day.

April 12.—Still improving, in every particular, and advised to continue treatment. Last appearance.

CASE 611.—March 22. ALEX. THOMPSON, aged 30. *Varicose Ulcer.*—About eight years ago, a small pimple appeared upon the anterior aspect of the lower third of the tibia, which, although not the occasion of much trouble, resisted all treatment, its chief characteristic being its obstinacy to heal. It never resulted in anything serious, until a few weeks ago, when the patient received a pretty severe blow on the part described; since which time it has been rapidly growing worse, and now presents an irritable ulcer, about two inches in diameter, and of a greenish hue, with angry elevated edges; the parts immediately surrounding the ulcer, for the space of several inches, are of a dark red or purplish color, and the adjacent veins much engorged, and in a varicose condition.

Treatment.—

℞.—Zinci Sulph., grs. xxx.
Morphiæ Sulph., grs. x.
Aquæ, ℥ij. M.

Apply twice a day, followed each time by an application of mild Zinc Oint. Apply a roller from extremity to knee.

March 25.—Ulcer beginning to assume a healthier character; swelling much reduced. Continue the Zinc application, but about half the strength, as first prescribed.

April 1.—A healthy base has been established to the ulcer, with small healthy granulations. Continue treatment.

April 12.—Discharged, cured.

CASE 612.—April 15. J. C. LONG, aged 41. *Talipes Equinus.*—This patient was at one time the subject of Talipes, in both feet; but several years ago, he was operated upon for one foot, which resulted in considerable benefit. The other foot is the subject of that variety termed Talipes Equinus, the fault being in the contraction of the tendo achilles, raising the heel about two inches, and walking upon the ball of the foot. Prof. Freeman severed the tendo achilles, and separated the severed ends for the space of one and a half inches. Instead of applying the instrument, usual in such cases, to correct the position of the foot, will simply pass a short strap around the foot, near the toes, and one around the leg, just below the knee; then, by passing a third strap through these, flex the foot to a proper position.

May 24.—The tendon has united, and the deformity corrected, patient being able to walk quite well. Discharged, cured.

Case 613.—April 15. Mr. B., aged 30. *Primary Syphilis.* Has been affected six weeks; there are three chancres, one upon the prepuce, one upon the superior part of the glans penis, and one under the corona glandis near the frænum of the prepuce, which is the largest; the penis has been considerably swollen, but now is somewhat reduced; there is as yet no swelling or enlargement in either groin.

Treatment.—

℞.—Tinc. Ferri Chlor., 3 ss.
Aquæ, ℥ ss. M.

Apply to chancres night and morning.

℞.—Potas. Iod., 3 ij.
Aquæ, ℥ iv. M.

Take a teaspoonful, four times a day.

April 19.—Chancres assuming a healthy aspect.

℞.—Gallic Acid, grs. xx.
Aquæ, 3 iv. M.

Apply to chancres three times a day. Continue Iod. Potas.

May 5.—Chancres entirely healed; says he never felt better. Discharged, cured.

Case 614.—May 8. Reese Hubbard, aged 34. *Cataract.* This is a case of Capsulo-Lenticular Cataract; the patient has been affected several years; he does not remember or know the cause of it, but he says it came on very gradually; there is entire opacity of both capsule and lens, and of the milky variety. Prof. Newton performed the operation of couching, after having previously dilated the pupil by means of Belladonna. Recommended to keep in a dark room for several days, and apply cloths wrung out of cold water, to keep down inflammation.

May 20.—Has entirely recovered from operation, and can see pretty well. Last appearance.

Case 615.—May 27. Thos. Moxley, aged 46. *Sciatica.* About two months ago, experienced a sharp and lancinating pain about the region of the sacrum, which gradually traversed along the entire leg to the foot, along the course of the sciatic nerve. The pains are intermittent, coming on toward morning, and continuing until several hours after he gets up; they will then subside, and he will be comparatively free from pain until early the next morning; at the same time, he will have violent attacks of headache.

Treatment.—

℞.—Quiniæ Sulph., grs. xx.
Ferri Ferro, grs. xv.
Morph. Sulph., Gelsemin, *aa* grs. j. M.

Make xv powders, one to be taken three times a day.

℞.—Tinct. Capsicum, ℥ ij.
Chloroform, Ol. Terebinth, Aqua Ammon., *aa* ʒ j. M.

Apply, with friction, to the affected part at night.

June 7.—Is improving rapidly; is now troubled only with a slight pain in lower part of the leg, near the ankle. Continue treatment.

June 21.—Scarcely any vestige of the disease; sometimes will have a pain for a few minutes about the ankle, but scarcely enough to be noticed. Continue treatment.

July 1.—Discharged, cured.

Case 616.—June 7. John Skalay, aged 44. *Conjunctivitis* and *Otitis.* This patient is of a Scrofulous diathesis. The cervical lymphatic glands are considerably enlarged, and sore; mucous membrane of both ears much ulcerated with a purulent discharge; experiences a whizzing and buzzing sensation in the head; a portion of the membrana tympani of the left ear has sloughed, and he says that he can not hear at all with that ear; the conjunctiva of both eyes considerably inflamed, and very sensitive to the light, so much so that he keeps them closed when the sun shines brightly; bowels constipated.

Treatment.—

℞.—Comp. Syr. Stillingia, ʒ iv.
Iod. Potas., ʒ ij. M.

DR. WELCH'S SPLINTS.

We have occupied so much space in reprinting Dr. Welch's pamphlet on the application of his newly invented Splints, that much interesting matter has necessarily been crowded out. This number does not, therefore, contain the usual variety, though we are assured it loses nothing in practical value. Dr. Welch has sent us a complete set of his Splints, which we consider one of the most useful and important inventions in modern surgery. Every physician, who practices surgery, should be provided with them. They are better adapted than any we have ever seen, to accomplish the end for which they are intended.

HOW ARE PATIENTS CURED IN THE COMMERCIAL HOSPITAL?

To this inquiry we answer, often in *spite* of treatment. To prove it, let us detail a case.

Not long since a patient in this Institute walked into the amphitheater before the class, was duly examined by the Professor, his disease pronounced pneumonia, and he was put upon calomel and tartar emetic. At the next clinic day, he was brought out on his bed. Decidedly worse. Calomel and tartrate of antimony continued. The cry at each successive appearance was, no better! no better!! Continue treatment At last, the Professor announced that the case was hopeless, the man must "go up," he *must die*—there was no chance. There was, therefore, no need to give more medicine; so the patient was put upon beef tea, wine, and a little quinine. Scalpels were whetted, and his body confidently expected soon to grace some dissecting table. But at the next clinic, lo, the same man *walked* into the amphitheater. Could it be he? Was it the same person? It was. A mere skeleton, still life animated his emaciated body; he lived, he *recovered*. Calomel and antimony brought him to the verge of the grave—beef tea, wine and quinine snatched him from the jaws of death. Had this man a little less vital stamina, he would have fallen a sacrifice on the altar of Science. What a pity old school doctors don't always "give up" their patients *at first*, and put them on beef tea and quinine. More lives would be saved. We earnestly urge them to adopt Dr. Bonnett's mode of treatment.

ECLECTICISM VS. ALLOPATHY.

If it be true, that we may "judge a tree by its fruit," then we may conclude that Eclecticism is on the *ascending career*, while Allopathy is nearly whittled down to a point in Cincinnati. We think that those who conceived and erected the building of the Ohio Medical College, certainly over-estimated the popularity of Old School Medicine in the West. To see the classes that assemble in the spacious lecture hall of this College, reminds one of the picture of "puss in boots." .With all their hospital advantages, they succeeded this winter, after mighty straining and travailing, in bringing forth the immense number of 32 full-blooded doctors—*only nine of whom were from other States*. This latter fact shows that the Ohio College has no influence outside of its own State. Contrast this with the list of graduates of the E. M. Institute, and a correct conclusion may be drawn relative to the prosperity and influence of the two schools. Our regular graduates numbered 44, and honorary degrees were conferred upon 4, Fifteen States were represented. The classes of the Ohio Medical College have, for the last few years, been growing "smaller by degrees, and beautifully less," and we think, from present indications, that a sixteen-by-twenty room will accommodate them next winter. We suggest that the trustees had better make this provision, and appropriate the building to better and more *paying purposes*. Soon, microscopic aid must be resorted to, to discover such classes in such a hall. The faculty, however, do not appear to see the ruin that is threatening them. It is stated by ancient writers, that "whom the gods mean to destroy, they first strike with blindness, that they might not see the abyss into which they are to sink." We presume these gentlemen are in the same condition. The preparatory work is done; the abyss yawns to receive its victims.

The fact is certain. It is well known that a debt of over fifty thousand dollars is hanging over the Ohio College, which is mortgaged to secure the same. In 1861, the money must be paid. The Legislature has been appealed to for aid, but has already refused to render any assistance. Next year, therefore, the mortgage will, in all probability, be foreclosed, and the building sold to redeem its bonds. The faculty, without they are blind and insensible, must see and feel the foundation upon which they stand, tottering beneath them.

On the contrary, Eclecticism never has been more healthy, flourishing, and popular. Decked with her garland of converts, in which bloom the offerings of a Bennett and Syme, she is "pluming her wings for a bolder flight," and soon her shadow will overspread our whole land.

MEDICAL COURTESY IN CHICAGO.

It seems that a regular Clinique is given, every week, in the amphitheater of the Rush Medical College, by Prof. Brainard. Dr. Steele, in company with another gentleman, both graduates of the same College, recently dropped in on one of these occasions, and quietly took his seat among the class. Prof. B. had commenced his lecture, but, seeing these gentlemen, he immediately stopped, and, retiring, sent in the following note:—

"Dr. Steele,—No person is allowed in the Clinique except members of the class and invited persons. D. Brainard."

Dr. Steele is one of the editors of the Chicago *Medical Examiner*, which is accused of being the organ of a rival school. Hence, we presume, Dr. Brainard's conduct.

This *gentlemanly courtesy* on the part of Dr. B. reminds us of the plan pursued by the Ohio Medical College of this city, on more occasions than one. The faculty who have the control of this great big building, either fearing that their hall will not accommodate more than their class, or conscious that there is something "rotten in Denmark," have more than once requested students from other colleges to retire from the hall. Dr. Brainard ought to belong to this gang of *gentlemen* (?). Such conduct justly merits, and always receives, the contempt of liberal men. Go on! we say, go on!! You thus advance the interest of your respective colleges gloriously.

THE FAMILY JOURNAL OF HEALTH.

Being constantly in receipt of letters of inquiry in reference to this journal, and not being able to reply by letter to all, I propose to answer some of the inquiries through the *Eclectic Medical and College Journal.*

The object of issuing such a journal, was to bring prominently before the public, the advantages claimed for the Eclectic system of practice, and to illustrate its superiority over the old-school or any other system of medicine; at the same time, conveying such information in regard to the preservation of health, good nursing, etc., as is admitted should be possessed by all. It is the intention to make every page readable, so that it will be a welcome visitor in every house where it is introduced. In proof that these objects will be carried out, I need but state that Professors King, Jones, Garrison, J. Milton Sanders, Z. Freeman, E. Freeman, Newton, Howe, and Hart, besides several other of our prominent Eclectic writers, will be contributors to its pages.

It is furnished at the low price of 50 cents—not, as some would intimate, to make it an *advertising medium*, but to place it within the power of our physicians to introduce it into the families where they practice.

I have several letters, requesting that twenty or more copies be forwarded as specimens, to assist in making up clubs. This I would gladly do, if I were able; but as this is not the case, I will send twenty copies two months on receipt of one dollar, or clubs may be formed, at the published prices, for three or six months.

J. M. Scudder, M. D.

We are indebted to Prof. J. King for the following translation from the French:—

Dissolving Power of Chloroform.—M. Pettenkofer states that the following numbers express exactly the relative solubility of various organic bases in 100 parts of chloroform: Morphia 0.57 parts, narcotine 31.17, cinchonia 4.31, quinia 57.47, strychnia 20.16, brucia 56.92, atropia 51.49, veratria 58.49.

Rubefacient or Vesicant.—Take of resin, yellow wax, lard, powdered cantharides, each fifty parts, turpentine ten parts, oil of lavender, oil of origanum, each one part. Melt the resin, wax, and lard; remove from the fire and add the turpentine, then the oils, and, lastly, the cantharides, stirring constantly. Spread this on silk or taffety, and use it locally as a derivative in neuralgia of the teeth, etc.

New Reagent for Silver.—According to Pisani, the iodide of starch is decolorized by certain salts. For instance, it loses its blue color in presence of the salts of silver, while those of lead do not affect it. From this property, iodide of starch may be used to discover the presence of silver in lead. Thus, dissolve the lead in nitric acid, neutralize the solution by chalk, and then add to it some drops of a solution of iodide of starch; if these are decolorized we may conclude the presence of starch.

Bark of Linden-wood.—Dr. Kirn states, that when we boil the bark of the linden tree in water, for a length of time, it becomes soft, supple, and susceptible of taking any form we may give to it, which it retains on hardening by cold, and may thus be substituted for gutta percha, to answer various purposes.

Liquid Glue.—M. Bœttger prepares an excellent glue, always liquid, by dissolving, in a water-bath, transparent gelatine with an equal weight of very strong vinegar, a quart of alcohol, and a very small quantity of alum. Manufacturers of artificial jewels make a great use of this glue, which serves admirably to unite fragments separated from bone, horn, shell, pearl, etc.

Odontalgic Mixture.—Take of chloride of zinc, perchloride of iron, each, fifteen grains; alcohol, distilled water, each, sixty grains; muriate of morphia, one third of a grain; of clove, fifteen grains; mix. A few drops of this on cotton, applied to the cavity of a decayed tooth, first cleansed, instantly calms the most lively pain.

Anti-Neuralgic Mixture.—Take of formic ether, 200 grains; tincture of balm, 1200 grains; morphia, one fourth of a grain; mix. To be used in frictions, five or six times a day, over the painful point.

Another.—Take of formic ether, two parts; formiate of quinia, one part; distilled water, 90 parts; syrup of codeine, 30 parts; mix. To be taken by spoonfuls every hour. This remedy has constantly succeeded where valerianate of ammonia had always failed.

Collutory for Muguet.—Take of borax, fifteen grains; water, three hundred grains; essence of mint, tincture of pyrethrum, each, two drops; mix. Neither sugar nor honey must be added to this mouth-wash, as they will give rise to lactic acid, which is favorable to the development of some parasite. The mouth should be frequently well rinsed with it, retaining it for some time in contact with the parts.

Vulcanisation of Oils.—A mixture of chloruret of sulphur and vegetable oils, as linseed, produces a solid body, resembling caoutchouc, but very brittle; 100 parts of linseed oil to 25 of chloruret of soda, makes the hardest mixture; to 15 or 20 of the chloruret, renders it quite supple; and to 5 of it, merely thickens without solidifying the oil. The bromide of sulphur produces the same effect.

CONFESSIONS OF A REFORMED SPIRITUALIST.

The Spiritual mania which, a few years ago, swept over the United States, we are glad to say, is gradually passing away, and we hope, ere long, the *ism* will be numbered with the "things that were," and a monument will be reared upon its grave to warn forthcoming generations of the folly of man, who would permit absurd superstition and blind credulity to usurp the throne of god-like reason. That the tendency of Spiritualism is to demolish the foundations of virtue, overthrow the temple of religion, and to cut asunder all honorable ties that bind the human family together in their social relation, and to rear upon their ruins the altars of Pantheism, sensuality and crime, is evident to every one at all familiar with its doctrines. Accept Spiritualism, and we at once sink in the abyss of vice, and become a degraded people. Virtue is no longer respected or valued, libertinism rules, the most holy relation of husband and wife is set aside, while "free love" and unbridled desires assume supremacy.

We think it our duty occasionally to call the attention of our readers to this subject, because we look upon physicians as overseers of the public health, and they can and should exercise their influence in breaking down a system so detrimental to physical and moral perfection. We add the following extract to show what one who has been behind the scenes, has to say upon the subject.

The Rev. T. L. HARRIS, one of the great Moguls of Spiritualism, as is known, has recently abdicated the "celestial science" in England, and the London *Advertiser* thus refers to a recent lecture of that notability:—

Mr. Harris held up to the eyes of his audience the system of Spiritualism as the most hideous and horrible thing which had ever come from the nether world. He said that he himself was a living proof of the danger, mentally and physically, of cultivating the so-called science of spiritualism. He mentioned that only a few years ago, it had taken so absorbing possession of his mind, and had obtained so complete a mastery over him, that it gave rigidity to the muscles of his frame, and a terrible, unearthly expression to his countenance. He added that he had seen and known many others—excellent and amiable persons before they became Spiritualists—from whom the power which the demoniacal system had acquired over them, had taken away their appetites, and unfitted them for the ordinary duties of life, crushed all their energies, mental and physical, deprived them of sleep at night, and caused their bodies to waste away, as if the victims of some fell disease which set all medical skill at defiance.

Others we have known and seen, whose arms and legs had become as cold and rigid as those of a marble statue, while the expression of their countenances was so horrible as more to resemble those of demons than of human beings. The Spiritualists of America, he further stated, are not only as a body Pantheists, rejecting alike the idea of the Scriptures as a divine revelation, and of the existence of a God, but that they are gross sensualists and utterly immoral in their conduct in all the relations of life.

The marriage vow imposes no obligations in the view of Spiritualists. Husbands who had for years been so devotedly attached to their wives that they have said nothing in the world but death itself could part them, have abandoned their wives, and formed criminal connection with other females, because the spirits had told them that there was a greater Spiritualist affinity between these husbands and certain other women, than between them and their lawful wives. Wives, too, the most devoted, and loving, and true to their husbands, that had ever contracted the marriage obligation, had left their husbands and children, and lived in open immorality with other men, because the spirits had told them that they ought to do so, on the ground of there being a greater Spiritualist sympathy between them and these men, than between them and their husbands.

BOOK AND JOURNAL NOTICES.

A Familiar Forensic View of Man and Law. By Robert B. Warden. Columbus: Follett, Foster & Co. 1859.

This is quite an original book, not so much in reference to the matter it contains, as the manner in which the subjects treated upon are connected. The author, adopting the maxim of Blackstone—that the sciences were of a sociable disposition—remarks, in relation to the object of the work, that it "is nothing less than an endeavor to shed the light of other sciences on legal learning, and to shed the light of legal learning on other sciences. * * * It is an attempt to bring jurisprudence somehow into the circle of other sciences." He has done this in a practical and pleasing manner, and has displayed in its accomplishment much erudition as well as scientific investigation. To be enabled to show the relation between man and law, presupposes an intimate acquaintance with the physiology of the human system, and especially with the operation of the mind through its instrument, the brain; and also a knowledge of the principles of law. It is evident that the author has given the subject of physiology a careful and rigid examination, without which his attempt would have proved abortive.

The volume contains a large mass of information valuable to the general reader, but will be of more special and practical utility to the physician and lawyer. It teaches the principles that should guide the one in giving, and the other in receiving evidence on matters pertaining to forensic medicine. It treats upon many interesting scientific subjects, and deals with them liberally and impartially. In short, it contains many things worth knowing, and any reader will be pleased and profited by its perusal.

The publishers will please receive our acknowledgments for a copy of the work through Messrs. Clark & Co. H.

The Eclectic Medical Journal. Edited by John S. Skelton, M. D., M. R. C. S. London, England.

We have just been shown a number of the above journal, from which we learn that the Reformers of England are hard at work in the good cause.

They also have an institution, called "The Eclectic Medical Institute," in which regular lectures are delivered; notwithstanding, the Old School influence, headed by the London *Lancet*, will not allow the government to charter the same. We hope that nothing will prevent them from ultimately obtaining all the privileges enjoyed by other medical schools.

We find the following list of names who are acting as "Agents for the sale of the Journal, and Eclectic and Botanical Remedies." Each of these persons will receive our journal for the present volume.

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Northampton: Published by John P. Berry, Corn Exchange, Parade. London: W. Tweedie, 337 Strand; T. Sanderson, 77 Fleet Street.

Therapeutics and Materia Medica: By Profs. Jones and Scudder, now out.

We call special attention to this book. See notice. This work will be noticed at length.

EDITORIAL ABSTRACTS AND CLIPPINGS.

Use of Chloroform in the Diagnosis of Spurious Pregnancy.—Cases occur in which the abdomen is seen to be projecting, swollen, rounded, well defined, and so exactly resembling the condition in real pregnancy, as to deceive the most skillful. The muscles, too, often become so sensitive, that the woman can not endure the necessary examination to determine her true condition. The cause of this singular abdominal swelling is very obscure, and has been supposed by some to depend on the accumulation of gas in the intestines; but Prof. Simpson has demonstrated that gas does not produce it, and thinks the phenomenon depends on some affection of the diaphragm, which induces its contraction, and the bowels are thus pushed downward in the abdominal cavity.

To determine whether the case is real or spurious pregnancy, he recommends the use of chloroform. When the woman is completely anæsthetized, the swelling in spurious cases entirely subsides, so that the abdomen becomes perfectly flat, and the uterus can be satisfactorily examined. After the effects of the chloroform pass off, the parts gradually resume their former distended condition. If the woman is really pregnant, no diminution of the abdomen occurs.

On the Treatment of Fissure of the Anus by Injections of Rhatany.—"We have seen recently," writes the foreign correspondent of the journal from which this quotation is made, "a somewhat deep and painful fissure of the Anus successfully treated by M. Trousseau, by means of injections of ratania administered several times in the twenty-four hours, together with the use of mild laxatives. It resulted from painful defecation, the bowels having been constipated for some days previously. The sufferings of the patient were intense, and lasted for fourteen hours consecutively. In reference to anal fissure, Trousseau denies the old theory, that it is produced by spasmodic action of the sphincter; on the contrary, he believes that it is most generally the result of irritation caused by the acrid discharges of the vagina finding their way to the anal mucous membrane, and completed during a state of constipation. Although spasm of the sphincter is almost an invariable accompaniment of this painful complaint, it can only, according to Trousseau, be regarded as an effect; in other words, the spasmodic action is entirely voluntary, and kept up by the patient in order to save herself the pain to which the irritable fissure gives rise, as is the case with a child who, when laboring under a chopped lip, purses up its mouth when it eats or laughs. M. Jobert adopts the same view as Trousseau; both condemn Boyer's method, which consists in the division of the fibers of the sphincter muscle, as altogether unnecessary."—*Ranking's Abstract.*

On a New Mode of Removing Naso-Pharyngeal Polypi.—The name given to this operation by M. Maisonneuve is "*boutonniere palatine.*" It consists in making a button-hole-like incision in the soft palate, and in drawing the polypus through this opening into the mouth, where it is an easy matter to apply a ligature, or to use the knife. The great elasticity of the parts composing the soft palate allows the polypus to be drawn through a comparatively small opening, and after the operation is completed, the same elasticity will generally serve to close the opening without the help of sutures. The direction of the button-hole is from before backward. M. Maissonneuve has already performed the operation, and with the most satisfactory results.—*Ibid.*

Organic Stricture of the Urethra treated with Iodide of Potassium alone.—Dr. Thielman, a surgeon in one of the St. Petersburgh hospitals, dispenses with the Bougies, and relies upon the Iodide of Potassium exclusively, in treating organic strictures of the urethra. He gives a table-spoonful, three times a day, of a solution of the salt, in the following proportions:—

℞.—Potas. Iod., ʒ ij.
Aq. Dis., ℥ vss.

The effect of the medicine is to establish a gonorrhœal discharge, and in the course of a fortnight, or two months, the induration softens down, and the stricture disappears. If iodism is excessive, the medicine must be discontinued for a time.

MARRIED—On the 27th of October, 1859, by Rev. N. E. Boring, Mr. Wm. B. Cary to Miss S. Alice Meady; all of Taylorsville, Ind.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*A Treatise on the Variations and Functions of Bile.* (Read before the "Academy of Eclectic Medicine.") By C. T. HART, M. D.

There is, perhaps, no subject in animal chemistry, enveloped in greater mystery, than the absolute chemical constitution and physiological importance of the bile. Many Herculean intellects have, from time to time, been employed in its investigation; but, notwithstanding the patient and laborious researches of such men as Liebig, Lehmann, Borzlien, Strecker, Bidder, Schmidt, and others, we are still unable to determine with certainty, its precise composition and functions. The bile is exceedingly unstable, and prone to undergo decomposition from the slighest causes. According to Lehmann, it is oxidized even in the gall-bladder, and in the latter situation, differs from that found in the hepatic ducts. As soon as it is exposed to the atmosphere, changes are set up which alter its constitution, and render its analysis uncertain. The most distinguished chemists have arrived at entirely different results, and amid the multiplicity of conflicting opinions regarding it, we are at a loss to decide which are most worthy of acceptance. Approximately correct conclusions only can be reached, concerning its true nature and functions. The opinion of no one experimenter should be adopted, but the results of all should be carefully studied, and that view entertained which seems to harmonize best with all the known facts of the case. Although so much obscurity yet rests upon this department of animal chemistry, still great advances have been made upon the crude opinions of the older physiologists. From time immemorial to a comparatively recent date, the liver was considered as the organ of sanquification. It was thought that the veins took their origin in this viscus, and conveyed the blood to the extremities, and then back in the same course, the motion being similar to the ebbing and flowing of the tides. The arteries, it was thought, contained vital spirits only. The scalpel has demonstrated the fallacy of such a theory, and with our superior knowledge, we are apt to' feel some little contempt for those who could accept such absurdities. It should be borne in mind, however, that our knowledge of the liver and its functions is not yet positive, and when chemistry has made further advances, posterity may regard the theories which we now adopt, as ridiculous and as far from the truth, as we know those of the ancients to be. A broad field for investigation is still open in this direction, and scientific inquirers may elicit much useful information by directing their researches into this channel.

Bile is not a chemical compound, but a mixture of various ingredients. Some of those ingredients pre-exist in the blood, and are separated therefrom by simple mechanical strainage, while others are not found in the general circulation, but are elaborated through the agency of the hepatic cells. If the term secretion be employed to designate strictly a formative result, it can not, with propriety, be applied to the bile, for, as has been stated, some of the constituents of this fluid already exist in the circulation, and are separated by transudation through the coats of the blood-vessels into the hepatic ducts. The term, however, though incorrect, will be employed in the course of these remarks, on account of its convenience.

Bile is secreted by the liver, which is the largest glandular organ in the body. The precise anatomical structure of the liver has long been a matter of dispute. It is now admitted, however, by all recent investigators, that it is essentially composed of the ramifications of five systems of vessels, inclosing in their interspaces the true hepatic cells. The vessels are, the portal vein, hepatic artery, hepatic veins, lymphatics and hepatic ducts. The portal vein and hepatic artery, entering the transverse fissure, divide and sub-divide, forming a kind of network, by which the organ is separated into minute but distinct portions, which are called "lobules" or "acini." Each acinus is thus isolated from those adjoining by a space—"interlobular"—which is occupied by a branch of the portal vein and hepatic artery. It is composed of twigs, sent off from these latter vessels, which, penetrating the substance of the lobule, and ramifying within it, ultimately unite and terminate in the interior in a minute radical of the hepatic vein. Each hepatic vein, thus arising, passes directly through the center of the acinus and empties into a larger branch, upon which the lobule rests, and which is denominated the "sub-lobular" vein. Beside these vessels, there enter into the structure of the lobules, the hepatic ducts and hepatic cells. The ducts consist of small cœcal tubes, which, arising in various parts of the lobule, unite and pass out, to join branches from other acini. The exact distribution of the cells has long been a subject of much disputation. It was for a long time thought that they were located immediately around the hepatic tubules, but the investigations of Dr. Leidy of Philadelphia, and Dr. Beale of London, seem to establish the fact, that they are contained within the tubules which branch off from the smaller hepatic ducts and penetrate all through the substance of the lobule.

From the foregoing description, it will be seen that blood is conveyed to the liver through two channels—the portal vein and hepatic artery—the former bearing that which has been distributed to the chylopoietic viscera, and which contains substances absorbed from the alimentary canal, the latter pure arterial blood; that these two systems of vessels, meeting in the interior of the lobules, terminate in the outlets of the hepatic veins, which, uniting, form larger trunks, and eventually empty into the ascending cava; that the tubules of the hepatic ducts contain the proper liver cells, and are in immediate relation with the portal capillaries, and separated from the blood contained therein by their thin, delicate walls alone, which can offer no obstruction to the passage of material from one to the other; and that substances, oozing from the capillaries into the hepatic ducts, are subjected to the influence of the cells.

With such an anatomical arrangement, the secretion of bile can be easily explained, and is not enveloped in that vail of mystery which some have thrown around it. To comprehend it, however, it must be borne in mind, that organic membranes are endowed with special affinities or attractions for certain substances, which attraction is determined by the anatomical structure of the membrane and the chemical constitution of the substance. If a bladder, for example, be filled with alcohol, and immersed in water, the water will occupy the pores of the bladder, and exclude the alcohol, because the membrane has a stronger affinity for water. The mechanical part of the process of the secretion of bile, is conducted upon the same principle. On account of the peculiar structure of the walls of the hepatic ducts, and the constitution of the hepatic cells contained therein, they possess a stronger attraction for certain ingredients of the blood, than any other tissue of the body. Hence, when these substances are brought in close contact with them, while passing through the portal capillaries, they are drawn through the thin wall of the capillary, and delivered into the hepatic duct. There is no doubt that the principle of special affinities manifested by organic substances, is all-sufficient to explain the secretion of such ingredients of bile as pre-exist in the circulation; and hence it is useless to seek any other. If it be objected, that this does not say *why* or *how* such an affinity is manifested, the reply is, it is a *property* of organic substances, and not more remarkable, and equally as intelligible, as to say, that it is a property of phosphorus to unite rapidly with oxygen, or of a nitrogenous substance undergoing oxidation to establish fermentative action in a solution of sugar. Liebig truthfully remarks, that there are limits in all sciences, beyond which it is impossible to go. There are, indeed, dark, mysterious depths, which the eye of man can not penetrate, or his sagacity illumine. A ferment is said to act by *catalysis;* certain attractions are explained by *special affinity;* both are terms invented to cover our ignorance—they do not explain a *cause.*

But an analysis of the bile discovers certain constituents, which can not be found in the blood. Biliverdin, taurocholate of soda, etc., are examples. Special affinity is not sufficient to explain their appearance; hence it seems to be the function of the hepatic cells to elaborate them from elements derived from the decomposition and metamorphosis of other tissues. Cell-action here proceeds upon the same general plan, as it does in other organized beings. Starch, sugar and gum are manufactured by the agency of vegetable cells, from agents derived from the external world; biliverdin is prepared by the action of the hepatic cells, from elements obtained from the blood. The conditions of the two differ; the general result is analogous.

The hepatic cells are nucleated, composed of a homogeneous organic substance, are about the 1-1200 of an inch in diameter, irregular in shape, and contain a large number of minute granules imbedded in their interior. They take up elements from the blood, and, after re-combining and re-arranging their particles, dismiss them into the ducts under new forms. Thus the carbon, hydrogen, nitrogen, oxygen and iron, which result from the breaking down of the red corpuscles, are newly arranged through their influence, and assume the form and character of biliverdin. The action is similar to that by which vegetable cells decompose carbonic acid and water, and combine the elements in such a way as to produce sugar or starch. The action is not more singular or remarkable, than the case of vegetable transformation, and offers a ready explanation of the appearance of such substances as taurocholate of soda, liver-sugar, etc.

It will be seen that two distinct and separate principles are involved in the action of the liver—the one, a mechanical strainage, upon the principle of capillary attraction; the other, a formative action accomplished by the influence of cells. It may be well to remark, that this view is opposed by so high authority as Lehmann. He contends that filtration can not take place here, as in the kidneys, because the hepatic tubules are surrounded by a thick layer of vitalized cells, through which the ingredients of bile must pass; and, further, that most of the constituents of the bile do not pre-exist in the blood, but must be formed by the liver cells. These objections do not seem to be valid. The anatomical arrangement which he describes, is incorrect, as is proved by the recent investigations of Drs. Leidy and Beale, who show conclusively, that the hepatic cells are contained within the tubules, and not situated around them. Moreover, some of the important ingredients of bile—cholesterine, for example—are admitted by all observers, to exist in the circulation, and must be eliminated by simple filtration. The view enunciated above, seems to be sustained by the greater weight of evidence, and to correspond more nearly with all the phenomena, and hence has been adopted.

Having thus explained the *mode* of secretion of bile, its sensible properties and chemical composition should, in the next place, claim our attention.

Sensible Properties.—Bile is a somewhat viscid, glutinous fluid, with a s. g. of about 1018. It varies in color in different animals, and even in different localities in the same animal. In carnivora it varies from a yellow to a yellowish-brown, while in herbivora it is of a green color; in man it is a dark golden-brown. The hepatic bile gradually turns green on exposure to the air, and its original color may be regained by exposing it to deoxidizing agents. The color is due to the presence of bile-pigment, which has received the name of *biliverdin.* This substance absorbs oxygen very readily, and in so doing, changes its tint. In this particular, it resembles indigo, which, when first expressed from the plant, is a yellowish liquid, but on exposure to oxygen, changes to a deep blue, and becomes insoluble. The oxygen may be readily separated from it by proper agents, when it immediately resumes its former color. The affinity of biliverdin for oxygen is so strong, that it will absorb this element from the blood-vessels, and in this way we readily account for the difference between cystic and hepatic bile. Though the usual color of human bile is of a dark golden-brown, it does not universally present this hue. It ranges through all shades from a whitish-pale straw-color, to a deep black. It is lightest in anæmia, chlorosis, or that condition of the blood in which the red corpuscles are deficient. This fact should be borne in mind, as it confirms the view that bile-pigment is elaborated from elements derived from the decomposition of the red blood cells. The darkest color is observed when the blood itself is dark, thick, and contains an abundance of corpuscles.

The *consistence* of bile varies in accordance with the conditions of the general system, and the nature of substances introduced. It is sometimes almost as fluid as water, and again as thick as melted glue or tar. The variation in consistency, as a general rule, corresponds with its color, it being thickest when dark, and *vice versa.* The bile undoubtedly, also, becomes inspissated, when long retained in the ducts or gall-bladder. This must follow from the absorbing action of the lymphatics, which are copiously distributed to these parts. Such inspissation has been observed in closure of the hepatic ducts, or the *ductus choledochus*, from spasm-biliary concretions or otherwise.

Investigators have found it difficult to determine the true *reaction* of bile, since it has a decolorizing or bleaching effect when brought in contact with litmus. It is generally considered, however, to be slightly *alkaline;* yet, under certain conditions of the system, and after long retention, it may gain acrid properties. Under ordinary circumstances, it is bland, and may be tasted with impunity; but Andral remarks—and other experimenters have observed the same—that, under different circumstances, it will produce ulcers and pustules upon the mucous membrane, when taken into the mouth. Dr. Rush noticed, that bile sometimes produced excoriations on the skin of those engaged in dissections. Bilious diarrhea is owing to the acrid property which it sometimes assumes, and painful, burning sensations and excoriations occur around the anus from the same cause.

Chemical Constitution.—We now enter upon the most difficult part of our inquiry. Notwithstanding the earnest and laborious investigations of the most eminent chemists, the exact chemical constitution of bile is still undetermined. The whole subject is shrouded in an obscurity which even the astute intellects of a Lehmann and Liebig have been incompetent to remove. Different investigators have arrived at diametrically opposite conclusions, and, amid these conflicting opinions, it is difficult to determine whose peculiar views are most worthy of acceptance. After a careful comparison of all the results, the conclusion is irresistibly forced upon us, that not a single *fact* is irrefutably established. It is our duty, under the circumstances, to exercise the most discriminating judgment, or we will fall into error; and, as the treatment of hepatic diseases should depend upon the views entertained respecting the chemical constitution and functions of the bile, a wrong theory may lead to wrong practice. If, therefore, it is impossible to arrive at a *positive knowledge* of the physiology of the liver, theoretical treatment should not be too far indulged in, but such measures should be employed as *experience* has proved to be the most beneficial. Medicine, as a science, is uncertain. There are at work in the human system, so many occult chemical and nervous influences, and so little is known respecting the action of the various fluids, that analogical reasoning can not enable us to determine what will be the effect of a substance, when taken into the body, from its constitution and sensible properties external to it. The fact is humiliating, but it is, nevertheless, a fact, and Lehmann, with his clear and comprehensive intellect, was forced, in disgust, to acknowledge it, when he saw the conclusions regarding the action of agents, deduced from the most careful and logical reasoning, proved to be utterly fallacious under the test of experiment. It is probable, and we earnestly hope the day will come, when such reasoning will be applicable in medicine. Chemistry must first be advanced. With our present fund of knowledge, theorizing is folly, and a practice based on theory alone, is an unsuccessful practice. Observation proves the truth of the remark, and we have the aphorism—"a good chemist, a poor practitioner; a good theorist, an unsuccessful doctor." All chemical and physiological truths are derived from experiment. It will do to invent a hypothesis to explain a fact determined by experience, but he who expects to ascertain a fact from theory, will certainly be disappointed.

These remarks, preliminary to a consideration of the constitution and functions of the bile, have been made, not to discourage chemico-physiological investigations, or to encourage a strictly empirical practice, but to guard those who are disposed to theorize, against being led astray by the seductive beauties of theory. Theoretical practice and experiment on the human subject, should be confined within the walls of hospitals, while the general practitioner must be content to let his own and others' experience be his guiding lights, and be satisfied to know that a medicine *does* have a certain effect, without knowing *how* that result is accomplished.

The following table, derived from the investigations of Berzelius, Frerichs, Scherer, Bidder, Schmidt and Lehmann, may be taken as an approximately correct representation of the constitution of bile:—

Water,	880.00
Glykocholate of Soda,	93.00
Taurocholate " "	
Biliverdin,	13.42
Fats,	
Oleates, Margarates and Stearates of Soda and Potash,	
Cholesterin,	
Phosphate of Soda,	12.24
" " Lime,	
" " Magnesia,	
Carbonate of Soda and Potash,	
Mucus of the Gall-bladder,	1.34
	1,000

I shall notice briefly, the most important of these substances, and endeavor to show which are formed by cell-action, and which pre-exist in the circulation and are separated by simple filtration.

Biliverdin.—This substance belongs to that vast group of organic bodies, whose exact chemical constitution has not been accurately ascertained. It is the coloring principle of the bile, and occurs primarily as a reddish-brown uncrystallizable substance, insoluble in water, somewhat soluble in alcohol, more so in caustic potash, giving at first a clear yellow color, which soon changes, on exposure to the atmosphere, to a greenish-brown. Biliverdin is extremely unstable, has a strong affinity for oxygen, and yields, on ultimate analysis, nitrogen and a trace of iron. In health, it is never found in the blood, and hence its place of origin is referred to the hepatic cells. It is probable that the elements, yielded by the decomposition of the red-blood corpuscles, are taken up by the liver cells and recombined into this substance. When formed, it passes into the hepatic ducts, and, escaping into the intestines, is mingled with the fæces, and eventually is thrown out with them. If, however, the ducts become obstructed, it is then resorbed by the lymphatics, and passes into the circulation. When this occurs, it stains the tissues of the body a peculiar lemon-yellow color, and gives rise to icterus or jaundice. Jaundice, therefore, is a symptom of the activity of the liver cells, and the closure, by spasm or concretions, of the hepatic ducts, or *ductus choledochus.*

Cholesterin.—Cholesterin is a hydro-carbonaceous substance, always occurring in considerable quantities, as an ingredient of bile. It is crystallizable, and appears under the microscope in the form of thin, transparent, rhombic plates. It is wholly insoluble in water, readily soluble in alcohol and ether—showing its fatty nature—and, to some extent, in the fatty oils and taurocholic acid. Its ultimate analysis, according to Lehmann, shows its composition to be represented by the formula $C_{37}H_{32}O$. Cholesterin occurs in various proportions in most of the fluids of the body. It is found in large quantities in the brain and nervous tissue, in blood, biliary calculi, in the fluid of hydrocele, in encysted tumors, in the solid excrements and the cheesy concretions ejected in the progress of phthisis. Its mode of origin is entirely unknown, and its office is equally obscure. By some it is thought to be prepared by cell action in the liver, and re-absorbed into the blood, to enter into the composition of the nervous tissue; while others regard it as a product of the metamorphosis of this tissue, to be thrown off by the liver, and, with the fæces, as purely excrementitious matter.

Resinous Constituents.—These consist of the two soda salts formed respectively by the union of soda with the conjugated acids, glykocholic and taurocholic. They are called *resinous constituents*, not because they resemble resins in their chemical composition, but because they appear in a semi-fluid form, simulating half-melted resin. These salts are important and constant ingredients of the bile—are not found in the circulation, but are elaborated through the agency of the hepatic cells, from elements derived from the blood of the portal capillaries. Both are readily soluble in water. The glykocholate of soda is crystallizable, and appears as white, silky needles, while the taurocholate is not crystallizable, but is seen in the form of circular drops, resembling oil globules. The former, according to Lehmann, is represented by the formula $Na\,O$, $C_{52}\,H_{42}\,N\,O_{11}$, while the latter is composed of $Na\,O$, $C_{52}\,H_{45}\,NS_2\,O_{14}$. It will be seen that these are proper salts, consisting of a base—the oxide of sodium—united with acids—the glykocholic and taurocholic. These acids may also be decomposed by long boiling with a solution of potash, and separated, the former into a non-nitrogenized body, *cholic acid* ($C_{48}\,H_{39}\,O_9\,HO$), and a neutral nitrogenized substance, *glycine* ($C_4\,H_5\,NO_4$); the latter into *cholic acid*, and a new nitrogenized body, *taurine* ($C_4\,H_7\,NS_2\,O_6$.) These substances are re-absorbed, pass into the circulation, and are appropriated for purposes which will be described hereafter.

The fats and sugar, formed in the liver, are reserved for special consideration at a future time. The substances described, together with water, the salts—chloride of sodium, phosphate of soda, lime, etc.—and the mucus of the gall-bladder constitute the greenish-brown, intensely bitter fluid, known as bile, the variations and functions of which will next be considered.

Variations and Functions of Bile.—The quantity of bile *daily* secreted and the *time* of maximum secretion, like many other points connected with the study of this complex fluid, are subjects of dispute among physiological chemists. Bidder and Schmidt were the first to institute reliable experiments to determine this matter. These experiments were made upon the lower animals by establishing a gastric fistula in the fundus of the gall-bladder, and drawing off the fluid at various times. In this way they estimated the proportional amount for every pound weight of the body, and with due allowances, applying the calculation to the human subject, concluded that a man weighing 140 lbs. would secrete 54 oz. daily. They also concluded from such experiments that the time at which the *greatest amount* was secreted, occurred about thirteen hours after the last full meal. These experiments show the time at which the bile is most *rapidly secreted*, but not when it is poured into the intestines in *greatest abundance*. Careful experiments instituted by other observers to decide the latter point, prove that the greatest flow into the intestines takes place immediately after eating, and within the first hour; after this time its flow is pretty constant. The secretion continues for many days after a meal, though in gradually diminished quantities. Those accurate and admirable experiments also discovered that the quantity of bile was influenced by the nature of the food. The secretion was much more abundant when the animals were fed upon nitrogenized, than upon amylaceous articles of food. When kept on an exclusively *fatty* diet, no more bile was secreted than when completely deprived of food. They moreover found that a copious ingestion of water caused an increase, both in the quantity of bile and its solid constituents.

Functions.—To determine the true function of bile it is necessary, first, to ascertain what part it takes in the digestion of the various classes of food. Repeated experiments have been made to determine this point, and satisfactory conclusions have at last been arrived at. Upon the *carbo-hydrates*—sugar, starch, etc.—it is found to exert no transforming influence whatever. It is true that when bile is kept for a time in contact with a solution of sugar, fermentative action is at length established; but Lehmann considers it due to the mucus of the gall-bladder and ducts, which, having undergone decomposition by exposure to the oxygen of the air, sets up catalytic changes in the sugar. If the mucus be entirely removed, no fermentation is excited. Upon this large class of bodies then it exerts no digestive influence.

Bile exerts no special action on the other class of calorifacient food—the *hydro-carbons*—as oils, fats, etc. These substances are reduced to *emulsions*, or minute mechanical subdivision, by which they are capable of suspension in water, through the agency of the *pancreatic* and *enteric* juices. It is true, however, that when these juices are mingled with bile, the process of emulsioning fats seems to be facilitated, yet, bile is not essential. Upon the albumenoid bodies—albumen, fibrin, etc.—it exerts no transforming influence. Thus it is seen that bile is not necessary for the digestion of any article of food.

Since then it is not essential to digestion, the question arises, is it purely excrementitious matter, and thrown out with the fæces, or is it re-absorbed from the intestinal tract and passed again into the circulation? Careful experiments seem to demonstrate the fact that it is not purely excrementitious. The coloring matter, and a portion of the cholesterin undoubtedly occur in the fæces, while the resinous constituents, it is equally certain, are reabsorbed. Experiments have failed to recognize bile in the blood of the portal vein by Pettenkoffer's test, yet, Bidder and Schmidt have shown that it disappears from the intestines, and that the amount of *sulphur* discharged with the bile into the alimentary canal, is greater than that to be obtained from the fæces; hence, it must have been absorbed.

The view that a large proportion of bile is reabsorbed, and that it is necessary to the vital processes, is confirmed by the following experiments: Gastric fistulas were established directly into the gall-bladder of animals, by which all the bile was drawn off. These animals invariably died from the twentieth to the thirty-sixth day, with symptoms of inanition. Digestion was not materially impaired, the appetite continued good, no crude food passed with the fæces, but the animal became gradually emaciated, all traces of fat disappeared, the hair fell off, and a disagreeable, putrescent odor occurred in the breath and fæces, until at length death followed from a gradual wasting away of all the tissues. Hence it seems necessary for the maintenance of life that bile should be poured into the intestines, and satisfactory proofs are afforded that its most important constituents are reabsorbed.

With these facts before us, the functions of the bile may be expressed in the following propositions:—

1. *It aids in the absorption of fats.*—It is true that bile is not necessary to reduce oils to emulsions, yet, experiments prove that its presence greatly facilitates their absorption by the lacteals. It is impossible, with our present knowledge, to explain the process teleologically. It is well known that fatty emulsions will rise much higher in capillary tubes, moistened with bile, than when dry, or wet with water, and it has been supposed that bile induces a modification in the relation of adhesion between the fatty particles of emulsions, and the moist membranes through which they have to pass. In this way capillary attraction is brought into operation. It must not be supposed that in the total absence of bile no fat is absorbed; a small portion passes into the lacteals under these circumstances.

2. *It prevents putrescence in the intestinal contents.*—It has been ascertained by Frerichs that when the ductus choledochus is tied, the contents of the bowels soon become completely putrid, and the same has been observed in jaundice.

3. *It represents other forms of metamorphosed matter, which, otherwise going to waste, is reabsorbed and appropriated for special purposes in the system.*—The elucidation of this proposition leads to a consideration of the *origin* of the bile. In entering upon this difficult inquiry, I must remark that the liver performs many distinct and separate functions. It is specially engaged in the destruction and growth of the red blood corpuscles, and elaborates sugar and fat. These subjects will be specially treated of at a future time. At present, I shall endeavor to determine the origin and final disposition of the constituents of bile proper—its water, biliverdin, choles-

terin, resinous salts, etc. Each ingredient must be considered separately, and it must be remembered that two actions are going on in the liver—the one a *strainage*, the other a *cell action*.

Water.—Water forms a large proportion of bile, and as it exists in great quanties in all the fluids, it is derived by simple filtration from the blood.

Biliverdin.—It has been previously remarked that in health biliverdin can not be detected either in the portal or systemic veins; it must, therefore, be elaborated in the liver, through the agency of the hepatic cells. It is unfortunate that so little is known positively, regarding the source from which this ingredient is derived. Its occurrence in the circulation is a pathognomonic sign of jaundice, but anatomico-pathological observations have not absolutely decided whether its appearance depends upon disease of the hepatic *cells* or *ducts*. The weight of testimony, however, seems to confirm the view that in icterus there is closure or obstruction of the ducts, while the parenchyma of the liver is healthy. Jaundice very seldom occurs in disease of the substance of the liver, and according to Lehmann, "almost never in the different forms of fatty degeneration or in tuberculosis of the liver, and very rarely in simple and red atrophy, in granular liver and hepatitis; while the only diseases in which it is almost constantly present are those of the biliary ducts and acute yellow atrophy." On the contrary, jaundice has been observed when there was a free passage of bile into the intestine. I think all the apparently conflicting facts can be best harmonized by adopting the view that biliverdin or bile pigment is elaborated by the hepatic cells, from hæmatin and other elements, yielded up in the liver by the decomposition of the red corpuscules of the blood, and is dismissed with bile as purely excrementitious matter. When once formed, if its passage to the intestines be obstructed, it is then resorbed by the lymphatics and tinges the skin. Jaundice, therefore, *generally*, is not a *symptom* of *torpidity* of the liver, but of *obstruction* in the ducts. The usual treatment by powerful cholagogue cathartics is evidently wrong; and serves to over-excite the already active cells, to increase the accumulation of bile in the ducts and biliary cells, and by mechanical pressure to break down and disorganize the tissues of the liver. If the obstruction be due to *calculi*, cholagogues may then be of service, by forcing them out from the accumulation of liquid behind; but in the event of failure, injurious consequences must follow their use. If closure proceed from irritation and spasm of the ducts, then relaxants, derivatives, diaphoretics, etc., are indicated.

But, the objection may be urged, that jaundice sometimes occurs when there is a free passage of bile into the intestines.

It may be met, however, by assuming for the liver what is observed in other organs,—and, indeed, pathology proves it—viz: that the whole liver rarely becomes diseased at once, and a portion of the ducts may thus be occluded, while others may convey bile freely to the bowels.

It is possible that the skin may be jaundiced, without the formation and re-absorption of biliverdin. When, from torpidity, a fatty, or granular condition of the liver, the hæmatin and other products of the decomposition of blood corpuscles, can not be appropriated, these substances, with due access of air, and vigorous oxidizing power of the blood, may be burned and converted into other and harmless products. The chemical composition of hæmatin (C_{44} H_{22} N_3 O_6 Fe) shows it to be poor in oxygen compared with other elements, and under proper conditions it may readily become oxidized and converted into carbonic acid, water, etc. If, however, the blood is changed, and the respiratory organs become diseased, whereby oxidation is retarded, then the hæmatin, unable to pass out by reason of the inactivity of the liver cells, and incapable of being oxidized in the circulation, may be deposited in the skin and give it the icteric hue. It is probable that some forms of jaundice may arise in this manner, and the position is sustained by the fact that, in fatty liver, icterus occurs "only when acute diseases supervene." In febrile and inflammatory states, oxidation is perceptibly decreased, the amount of carbonic acid excreted is diminished, and effete materials are thus imperfectly burned.

Cholesterin.—This substance is found in greatest abundance in the brain and nervous tissue, and probably is a residue of the oxidation of the *phosphorized* oil, upon which the functional activity of the nervous system depends. It is a fatty body, probably associated originally with phosphorus, which, being oxidized, leaves the cholesterin. It is absorbed by the vessels, and the greater part, no doubt, is oxidized in the circulation. The small amount of oxygen (C_{37} H_{32} O) entering into composition, favors this view.

Resinous Constituents.—These substances are the glykocholate and taurocholate of soda, which have been fully described. The organic acid, *cholic*, (C_{48} H_{39} O_9 HO), which enters into their composition, is rich in carbon and hydrogen, and is no doubt produced, as contended for by Lehmann, from the sugars and fats. These resinous constituents meeting the digestive juices, are decomposed in the alimentary canal, their soda uniting with the hydro-chloric acid of the gastric juice, forms chloride of sodium, taurin is excreted with the fæces, while the *cholic* acid is absorbed and burnt in the circulation for the production of heat. Thus bile is the temporary representative of metamorphosed substances which are put to further uses in the economy. It is changed by the chemical action of the intestinal secretions, so that it can not be recognized in the chyle or portal blood, but its essential constituents are not lost to the body. With this view of its functions, the explanation why animals will die when deprived of its use, is apparent. The absorption of fat is retarded, and the entrance into the circulation of substances abounding in carbon and hydrogen is prevented, and the animal is in fact deprived of calorifacient food, and death results from actual freezing.

ART. II.—*The Antiphlogistic Treatment of Fever.* By Prof. H. D. GARRISON, M. D.

It is now more than a quarter of a century since a few bold thinkers in medical science, raised the standard of reformed or eclectic medicine. Never did innovation meet with more determined opposition, nor was triumph ever more complete. Had the new practice been radically incorrect, its complete annihilation would long since have been effected. One of the fundamental doctrines of the eclectic school, from the very beginning, was a firm and uncompromising opposition to the use of the lancet, antimonials and mercurials; in short, to the "regular antiphlogistic plan of treatment." Hitherto eclectics have, for the most part, sustained their ground, and defended their principles, by their unprecedented success in practice; but this defense alone, which necessarily involves so much crimination and recrimination, ultimately resolves itself into experience vs. experience. While I do not wish to divert attention from the foregoing issue, I desire to present for examination the chemico-pathological foundation of the opposing theories, which, after all, must determine their relative merits.

It is to be lamented that our knowledge of pathological chemistry is not more complete; yet the mortifying fact that we do not comprehend all the minutiæ—*the causæ causarum*—of disease, should not prevent us from using such facts as have been elicited, in the explanation of morbid processes. A disposition, against which I earnestly protest, has manifested itself among physicians from time immemorial, to explain every vital phenomenon by the invocation of an indefinable, Protean power, called "vital force," whose action is as far beyond the domain of law, as its essence is removed from matter. The advocates of this Deity of forces, who are, indeed, not a few in number, seem never to be at a loss for an explanation of the most intricate vital processes, and hence look upon chemical and physical expositions and demonstrations with a kind of professional contempt.

"It would be well if these spiritualists would look down from the high stand they have chosen, and deign to believe that there are some among those experimentalists, who, clinging to matter, and gathering their facts with ant-like industry from the lowly earth, notwithstanding that they have long held communion with the poet-philosopher Plato, and the philosophical natural inquirer, Aristotle, and have some familiarity with the paraphrases of Hegel and Schelling, are yet unwilling to relinquish their less elevated position. If these happy admirers of their own Ideal had descended from their airy hights and carefully examined organic and inorganic matter, they would not have deemed it necessary to assume, that beside carbon, hydrogen, nitrogen, and oxygen, organic substances must also contain an *organo-genium*, or latent vital force, or whatever else they may be pleased to call it."—*Lehmann.*

I shall not now attempt to improve the received nosological arrangement of febrile forms of disease, however objectionable and inconvenient that classification may be in a purely scientific point of view. Yet it must be remarked, that so long as chemico-pathological investigations are wanting, or are ignored by nosologists, and physical signs alone taken as guides, diseases, really most dissimilar, must be grouped together. Hence, he who would generalize upon a class, or even upon a genus, will often be perplexed, indeed, by the inconsistencies involved in the best description.

"A person has an attack of fever," says Dunglison, "when he is affected with rigors, followed by increased heat of the skin, quick pulse, languor and lassitude." Since a definition is required, perhaps the foregoing is quite as unobjectionable as any extant, and yet every practitioner has met with cases in which one or more of these symptoms did not appear. It is generally conceded, that idiopathic fevers at least are induced by the action of malaria, or of contagious matter, upon the blood. Of the physical and chemical properties (and hence, of the *modus operandi*) of these causes, we know absolutely nothing, except what may be learned by analogical and hypothetical reasoning. Liebig has, indeed, traced in the most lucid and masterly manner, the wonderful coincidences in conditions, phenomena and progress of diseased action and fermentation. Yet the essential feature of fermentation itself—*i. e.*, communication of state or condition of one body to another by contact—is wrapped in mystery.

As in inflammation, so in fever, physicians have deemed the existence of an abnormally high temperature, indubitable evidence of an increased evolution of caloric, and, therefore, of augmented interstitial oxidation. But, as I have pointed out in a previous article,* in all inquiries relating to the temperature of the body, the influence of perspiration as a heat-abstracting process, must not be ignored. A portion of water, which, in its fluid state, could only abstract one degree of heat, can, on being converted into vapor, absorb more than one thousand degrees, without in the least raising its sensible temperature. Hence, insensible perspiration must be regarded as a powerful means of refrigeration, and the result of its suppression, *cæteris paribus*, could not be less than the highest fever heat. During one day, there is generated, in a healthy adult, at rest, enough heat to raise the temperature of 20,750 lbs. of water one degree, or, in an hour, sufficient to raise 140 lbs. of water (average weight of men) more than six degrees. Hence, perspiration being suppressed, the difficulty is not to explain the rise of temperature (fever heat), but to account for its not rising higher, since radiation alone, in summer, or in a warm room, could do little or nothing in the way of depression. I need not more than remind any practitioner, that during the actual presence of fever, perspiration is almost completely suspended, and that as soon as it is fairly re-established, the heat of the fever is gone. Hydropaths have repeatedly shown that the same end might be attained temporarily by the wet sheet, sponging, etc., and, if abnormal heat were the only symptom to be combatted, no better plan of treatment would be required.

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* See March No., 1860, Article "Inflammation."

To illustrate the process of interstitial oxidation and its products, the animal organism has been aptly compared by physiologists to a furnace, the food being represented by the fuel, and the excretions by the ashes. Now, it is evident, that the aggregate amount of excreta (ashes) is a correct exponent of the amount of combustion; and, further, that the appearance of partially-burned substances in the excreta (ashes) is indicative of an imperfect supply of oxygen. If we now recur to the symptoms of fever, we shall find, among the most prominent and constant, *dry skin*, *scanty and high colored urine*, *torpid liver*, *constipation of the bowels*, etc.; in short, that most of the excretions, and often all, are *diminished in quantity as well as changed in quality*. Since every secretion and excretion presupposes an amount of oxidation, measurable by its quantity and quality, and since, during the presence of fever, all are diminished in quantity and contain imperfectly oxidized substances, the conclusion that the due æration of the blood was in some way prevented, seems inevitable.

With regard to the changes in the quality of the urine, in the pathological state now under consideration, Lehmann, whose original and critical investigations in this department of science entitle him to rank as the highest authority, remarks: "Now, if the urea be produced from the uric acid by the partial oxidation of the latter, (this point is fully established by later investigations.—G.), anything impeding this process must cause less urea and more uric acid to be separated by the kidneys; and hence we see why the amount of uric acid in the urine must be increased in fevers and other disturbances in the circulation and respiration. We have seen that, in like states, oxalate of lime and lactic acid increase for a precisely similar reason." The high amber-color of febrile and inflammatory urine, also the so-called "brick-dust deposit" from the same, are caused by an abnormal abundance of uric acid and its saline combinations. On this important point, Lehmann further remarks: "In fever, also, the due relation between respiration and circulation is no longer maintained, and hence there is augmentation of the uric acid in the urine; but none but chemists could be led to the *erroneous idea, that in fever, too much oxygen is conveyed to the blood; in short, that fever is attended with too rapid oxidation.*" * * * For, *there are no acute, and but few chronic diseases, in which the oxidation of the constituents of the blood is not diminished or impeded.* The proof of the assertion will, in a future part of this work (Physiological Chemistry), be made as evident as the fact, *that there is no disease characterized by a too sudden or rapid oxidation of the blood.*

In discussing the functions of the liver, the same author further remarks: "We are, however, ignorant whether the blood, in febrile and inflammatory conditions—where its oxidation is considerably diminished—loses the capacity for metamorphosing these biliary matters, like the extractive matters, uric acid, cystine," etc.

The blood, like the air we breathe, is mostly purified from malarial and contagious matters by oxidation; and the "critical discharges" which usually announce the return of health, are, for the most part, the results of the re-establishment of the previously impaired function of the lungs. There is, indeed, no longer any way of setting aside or avoiding the plain truth, that physiology, pathology, and practice, all rest upon chemical sub-strata. Medicines must be regarded as chemical reagents, and practitioners as practical chemists. The humiliating fact that we understand the actual *modus operandi* of but few of these chemicals upon the living organism, affords not a shadow of objection to the foregoing view, but should prove the strongest incentive to future exertion and investigation in this much neglected department of medical lore.

If the foregoing principles are correct, it necessarily follows, *that any measure or plan of treatment, the effect of which is to further impair the due oxidation of the blood, is positively injurious to the patient.* Such a remedy is venesection. Even its most ardent friends and advocates must admit, that it directly diminishes the number of red corpuscles in the blood, and, thereby, its ability to receive and carry oxygen. That this remedy has been almost indiscriminately prescribed for thousands of years, is, to the profession, perhaps, the most humiliating fact recorded in the history of medicine. Yet even now, the sanhedrim of Allopathic medicine in America presents this measure as the shiboleth whereby to distinguish the self-styled "regular practitioners" from all others. But, if the best German practice can be received as a sample of "regularity," then the Eclectic is decidediy the most "regular practice" in America, as will appear from the following incidental remark of Prof. Lehmann, in speaking of the blood:—"If such analysis be difficult, it is at all events not impracticable, unless physicians *adhere to what is now regarded as the* RATIONAL *treatment of disease, and abstain altogether from prescribing venesection.*"

In this same category with venesection, are to be placed the antimonials and mercurials, whose indirect effect upon the blood is to diminish the number of red corpuscles. On the other hand, quinia and its salts, whose febrifuge properties are most firmly established, have been found, by recent investigations, to actually increase the ability of the colored corpuscles to receive and convey oxygen.

In conclusion, I must remark, that some pleasant remedy, which can supply the system with an abundance of oxygen in an available form, is greatly needed. There can be no doubt that the introduction of such a remedy would mark the commencement of a new and brighter era in the treatment of many diseases now regarded as incurable.

CINCINNATI, *April 20th.*

ART. III.—*Physiological Incest—A Recent Discovery.* By W. BYRD POWELL, M. D.

By the above title I designate marriage in contravention of physiological law, or physiologically-illegal marriage.

The conviction is widely spread and deeply founded in the public mind, that consanguine marriage deteriorates the species, by entailing on its progeny idiocy, and such other cerebral imperfections as produce insanity, and constitutions so depraved as to result in all the known scrofulous forms of disease. And so confidently is this opinion entertained, that legislative bodies have prohibited by statute the marriage of parties within certain degrees of consanguinity. As thoroughly as the public mind is convinced that the evils above named result from consanguine marriages, yet statistics have never sustained it; they show that there is a much greater amount of these evil results outside of the circle of consanguinity than in it, and of this character is a very striking fact, which was communicated to me a few weeks since, viz:—Dr. Patterson, Superintendent of the Idiotic Asylum of Ohio, informs me that, though he has been careful in his inquiries about the progenitors of the idiots brought to the institution, yet he has been unable to find that more than two per cent. of those idiots were the progeny of extra-consanguine progenitors. Now, inasmuch as it can not be conceded that physiological progenitors, holding a physiological relation to each other, can produce idiots, the question becomes an exceedingly grave one, what caused so large a per centage of idiots outside of the circle of consanguinity? For, whatever the cause may be, it is incomparably more extensive or efficient than consanguinity, the usually assigned cause of idiotic productions.

The fact has been established, that idiots never result from the circumstance of consanguinity, but statistics show that outside of consanguine marriage, a highly fruitful cause of congenital idiocy exists, and an effort to discover this cause certainly claims the attention of all physiologists and philanthropists. To improve or meliorate the condition of this unfortunate class of our species, is certainly very commendable, and yet it must be conceded to be far more commendable to discover and remove the cause of their production. I very truly entertain the conviction that I have discovered the cause. About fifteen years ago I was induced to suspect that a physiological incompatibility frequently obtained between the sexes in relation to progeny, and thus I was induced to adopt an active and careful course of observation of progenitors and progeny, and the result has left no doubt on my mind as to the truth of my suspicion. This incompatibility obtains thus: Certain of the human temperaments are incompatible in relation to progeny. *A priori*, this proposition, it would seem, bears upon its face, the conception of a greater probability of truth than that of consanguinity, because temperament is a positive condition, and therefore capable of agency; but consanguinity is a mere relation, and hence incapable of an agency. Observation has forced me to the conviction, that to this incompatibility is attributable all the idiocy, much of the insanity, all of the tubercular consumption of the lungs and abdominal glands, all the known scrofulous forms of disease, which now afflict the civilized people of the world. I admit, however, that those evils do sometimes attend consanguine progenitors; but I am sure that consanguinity has no agency in the premises, for, as frequently as I find consanguine progenitors to have the right temperaments, I have found the progeny all right; and I am very confident that an exception can not be adduced. And, during the past fifteen years, when

I have seen other progenitors than the consanguine to have wrong temperaments, I have found the progeny wrong; and here, again, I challenge an exception.

With a modification, I adopt that system of the temperaments which is the most generally known, and which has descended to us from the ancients, and which embraces four temperaments, viz:—Sanguine, bilious, lymphatic, and melancholic. The description given of the last, is so indicative of a diseased condition, and the fact that all the illustrations I ever saw of it, were diseased subjects, induced me to discard it as a temperament; and I did the same with the so-called nervous temperament. Nevertheless, early in my investigations of this subject, I was brought to the conviction, that humanity is distinguished by four temperaments; and, after many years of observation, I met with what I supposed to be the fourth temperament, and thirty years of additional observation have afforded me no reason to doubt that I have discovered the fourth temperament. (*See* "*Natural History of the Human Temperaments*," *by the author.*)

Long and persevering observations have penetrated me with the conviction, that the sanguine and bilious temperaments act as a *sine qua non* in the transmission of life and the perpetuity of the species; hence, I regard them as having been originally founded in the constitution of man. For these reasons, I denominate them the vital temperaments. The Lymphatic and Encephalic temperaments, I hold to have been acquired—to have resulted from influences which are incidental to civilization; hence, I denominate them adjunctive temperaments. I am now prepared to explain the proximate cause of physiological incest, or physiologically-illegal marriage.

The two following laws will enable all those who understand the temperaments, to distinguish at sight the physiologically-incestuous:—

I.—The marriage of any one to another one of the same temperament, will be incestuous. Illustration:

1. When both parties to a marriage have the sanguine-encephalic temperament, their children will die before attaining the age of three years, with dropsy of the brain, or tubercular inflammation of its membranes.

2. When both parties to a marriage have the sanguine-bilious, lymphatic temperament, the children will all die of tubercular consumption of the lungs, or the abdominal glands.

3. When both parties to a marriage have the bilious encephalo-lymphatic temperament, the children, in the proportion of 5 to 7 or 9 to 11, will be dead-born.

4. When both parties to a marriage are bilious-encephalic, the children will be idiotic, rachitic or hydrocephalic.

II.—When an adjunctive temperament enters into the constitation of each of the married parties, the marriage will be incestuous. The preceding four cases illustrate this law as much as they do the first, for an adjunctive temperament prevails in the constitution of each of the four parties. Nevertheless, I will illustrate this law by unlike or dissimilar temperaments.

5. When one of the parties is bilious-lymphatic and the other is sanguine-encephalic, the union will be highly incestuous, and the progeny will die young of scrofulous forms of disease.

6. When one party to a marriage is sanguine bilious-lymphatic and the other is sanguine bilious-encephalic, the results to the progeny will be the same as case 2.

7. When one party is bilious-encephalic, and the other is bilious encephalo-sanguine lympathic, the progeny will sooner or later become insane.

III.—When the constitutional similitude between married parties is so nearly complete that observation can not detect an appreciable difference, no progeny will result. Illustrations:

General Washington and his wife were both admirable illustrations of the sanguine temperament, and they, as it is known, had no children. This circumstance was a great loss to the world, because Mrs. Washington could not have been the mother of an ordinary son, and the General could not have been the father of an ordinary daughter.

General Jackson and his wife were also illustrations of this law, for they were bilious and childless.

IV.—In all marriages with a view to, or a probability of progeny, one of the parties should have a vital temperament; that is, should be either sanguine, bilious or sanguine-bilious; and then it is best that the other party should be more or less adjunctive.

NOTE.—The preceding four laws have been deduced from an immense number of observations, made during a period of fifteen years.

This I believe to be the only incest that is recognized by the physiological laws; and all marriages in conformity with the physiological laws, I hold to be legitimate and proper, without any reference to the social or religious relations of the parties. Progeny that results in contravention of municipal law, are vulgarly denominated "bastards;" but the bastardy that results from a violation of physiological law, is the most deplorable, because such bastards can neither enjoy life nor be useful. Bastards, under the municipal law, are regarded as the products of sin, and therefore are held in disgrace, and yet physiologically, they are very frequently in the highest degree legitimate, and are the furthest removed from bastardy. I of course make no objection to municipal legitimacy, but it grieves me to observe, as I do, so much physiological illegitimacy in society.

This physiological incest has, unsuspected, operated for so long a time in our species, that at the present time I verily believe it to be nearly impossible to find an individual in whose constitution there is not some constitutional taint of scrofula. For the past four or five years I have directed my observation to this subject, with reference to human longevity, and the result has been the conviction, that of all the causes which conspire to reduce longevity, this is the chief. And I do not believe that a hundred years is the full measure of a physiologically legitimate constitution.

During an early period of the human race, before it is probable that the lymphatic and encephalic temperaments had obtained an extensive existence, the average of human longevity is represented to have extended to several hundreds of years. So extensively mischievous is this incest to human society, the time can not be remote when stringent measures will be adopted for its suppression. When it was supposed that the evils complained of resulted exclusively from consanguine marriages, it was thought to be wise and proper to prohibit the marriage of consanguine parties. If such legislation were proper, it can not be less proper now to declare physiological incest to be a crime against society, because it really is, and should be punishable by municipal law. I would approve of such legislation, because it would impel society to obtain a knowledge of this subject, and our physicians to a study of the temperaments, for there is not one in a thousand of them who can distinguish physiologically incestuous parties, although I have so clearly opened the subject, that no one acquainted with the temperaments can possibly fail.

This physiological incest is a subject about which no properly constituted lady or gentleman can feel indifferent, and this is now being manifested by young people in various sections of our country, who, through a wise and prudent desire, are sending me their daguerreotypes, to enable me to inform them in relation to their physiological compatibility.

An army of public teachers of this subject could now employ themselves both agreeably and profitably, and I would delight to prepare them for it.

A crude notion of the law (I), which I have presented, prevails extensively in this country; hence persons are frequently heard to say, that when a person is seeking a companion in marriage, the object sought should be the opposite of him or herself, as much as possible, in person, complexion, etc. But in this rule, there is no security against incestuous marriage. I know a bilious-lympathic gentleman, who sought a wife under the guidance of this rule, and he succeeded in getting the wife, but not in avoiding the incest. His person was full and rotund, large thorax and abdomen, dark brown hair and eyes, with dark skin. The lady was sanguine-encephalic, slender and lean person, contracted thorax and abdomen, light hair, light blue eyes and fair skin. With reference to progeny, both felt secure in the fact of their great dissimilitude, but in six years both were greatly surprised that they could not have a child to live five years. One died of tuberculous meningitis; one of tabes mesenterica. Case 5 under the II law, represents these parties. The only safe guide against incestuous marriage, is a knowledge of the temperaments.

ART. IV.—*Clinical Reports of Cases occurring in Private Practice.* By O. E. NEWTON, M. D.

MESSRS. EDITORS:—Inasmuch as you intend the *Eclectic Medical Journal* to occupy a position as a medium through which medical men can communicate all matter of a practical character, I therefore propose to furnish a series of short articles, or, rather, detailed accounts of cases treated by me. And in doing so, I propose to make them brief, and at the same time sufficiently in detail to have each reader understand the treatment I use in such cases, and to enable him to repeat the treatment if he approve of it—though to some it may only be a recapitulation, and to others it may be considered very plain; but a fear that I may be considered gratuitous, shall not prevent me from treating the subject in such a way as to enable each reader to have the practical idea or treatment that I wish to convey—the adaptation of the Irritating Plaster, or Tar Ointment, described in Prof. King's Dispensatory, to the cure of various chronic diseases, where counter-irritation is intended.

When I was a student of medicine, attending the lectures of the late Professor Morrow, my attention was often called to the use of this article, even in such favorable terms that I was disposed to think the Professor almost mad with enthusiasm in its recommendation; but, after years of practice, I have been convinced that not half of its real virtue or curative properties have been described.

CASE 1.—Mr. E——, aged 35 years, was severely attacked with bloody flux. After a lingering illness in the country, he was again enabled to walk about. The usual Allopathic treatment, salivation, etc., was used in the case; the patient was seemingly much better, but the discharges from the bowels were still frequent. His physician treated him several weeks, but failed to be able to control the frequency of discharges. Being discouraged in getting relieved, he applied to me.

When he came, he was the subject of very frequent and copious discharges of a mucous character from the bowels; there was also considerable tenderness of the whole abdominal region; the edges of the tongue very red and smooth, slightly coated in the center and back part. He was much emaciated, weighing some forty pounds less than when he was taken sick, some four months previous.

I began with the use of the ordinary tonic and astringent treatment, together with mucilagenous drinks, etc.; slight irritation of the surface of the bowels by the use of stimulating liniments, moderate but a nutritious diet, bathing, proper rest, etc. This treatment I continued for several weeks, without any improvement in his case. Being discouraged with my previous treatment, I concluded to try, in conjunction, the effectual application of the Irritating Plaster. I prepared one large enough to cover the major portion of the abdominal region, spreading it upon a piece of adhesive plaster, leaving a margin of an inch uncovered, so when it was slightly warmed the plaster would adhere to the surface. This plaster I re-spread, and applied every other day until there was a free pustulation of the whole surface to which the plaster was applied. I then ordered a poultice of ground flax-seed, to be changed twice per day,—(the flax-seed, I think, will produce more suppuration than anything else that can be used),—to be continued until the part was healed up. I then again applied the plaster in the same way. The second application produced much more copious suppuration.

In two weeks from the time I began the adjunct treatment of the Tar Ointment, the patient left for home, a well man, and continued so.

Case 2.—In the year 1857, a Mr. S——, of Kentucky, was brought to me in the following condition, and gave me this statement of his case:—

"I was about 15 years of age when I first became weak in my back, which weakness continued until I was 17, when I became entirely paralyzed, that is, my lower extremities. The disease of my back did not affect my legs until about three months before I was thrown off my feet. I suffered very little pain during my confinement, considering the fix I was in. My legs and body became slightly numb, and kept getting more so until they were without feeling."

In a subsequent letter, dated Dec. 13th, 1859, he says, in speaking of his case:—

"In about six months after I became helpless, I was taken to you. You prescribed for me, and I was brought home again. In about three weeks after I began to take your medicine, I began to move my toes a little, and continued to improve until I arrived at a tolerable good state of health."

I ordered him to use the Catawba wine, manufactured by our distinguished citizen, Nicholas Longworth, Esq. To one gallon of the wine, I put of Phosphate Iron, ʒi; Precip. Carb. Iron, ʒiss. Dose, one table-spoonful, three times per day. With this as an internal remedy, I used as an external one the Irritating Plaster; there being a large posterior spinal curvature, the protuberance being about four inches. The plaster was continued over the part of the spine which seemed to be the seat of spinal irritation, producing copious discharges, and then healing it up each time with the flax-seed poultice. This treatment was continued until he was able to walk as well as any one, but his back is occasionally weak—generally, however, from exposure—but never has he been laid up. Though there is still a very large curvature, yet the spine seems to be sound.

I would here add, in passing, that this case established my reputation in that neighborhood, so that I have done a large practice in the way of consultations ever since.

Case 3.—A lady from the same neighborhood, consulted me with disease of the heart. Her condition was very distressing. She had not had a regular night's sleep for months, having sat in a chair all night, unable to take a recumbent position for three months before I was consulted. She was subject to suffocating spells, feeling as though she could not live if she did not get more fresh air at once.

This lady was placed under mild nervine treatment, but under the full influence of the irritating plaster, making a violent sore over the region of the heart, encouraging suppuration as long as it could be kept up, by the use of the flax-seed poultice. I then re-applied the plaster, and afterward the poultice, as before, until she was entirely cured, when she wrote me the following letter, dated Aug. 7th, 1859:—

"I have just finished taking your medicine, and have derived the greatest benefit from it. My general appearance is improved, and I feel like a new creature. I have no burning in my head; my side feels well at this time. When I look back and see how poorly I have been, and now to think I can lie down at dark and sleep until morning, and not wake, you don't know how much good it does me. I can not feel thankful enough to you for what you have done for me."

Case 4.—A young miss, from the center of the State, came to consult me, April 28th, 1859. Her age was 25 years; very full habit; weighed about 150 pounds; has been the subject of the most painful symptoms; has been for two years scarcely able to walk, from a very violent pain in the back, bearing down pain in the region of the womb, irritation of the neck of the bladder, painful micturition, excessive leucorrheal discharge, cold hands and feet, low form of fever, particularly at night.

Examination by the speculum, exhibited a slight retroversion of the neck of the womb; the menses were partially suppressed, lasting only one or two days, attended always with a great deal of pain; skin dry and husky; appetite poor; restless sleep, attended with the most frightful dreams.

I used some general treatment, but as the pain as well as all the trouble seemed to be in the region corresponding with the womb, kidneys and part of the bowels, I believed all the symptoms would be removed after a full counter-irritation had been effected over that part referred to. I ordered the continued use of the irritating plaster as often and as thoroughly as it could be borne—she receiving the treatment at home—when she wrote me the following letter, dated Sept. 13th, 1859:—

"With much pleasure I write you, and gladly can say that I am quite well. I suffer no pain; have no bearing down; have no leucorrheal discharges, and my cheeks are rosy and red."

Case 5.—A lady, Mrs. L——, from the northern part of the State, applied to me for relief on the 1st of Nov., 1859, with the following symptoms, as given by herself:—

"Age 24. Menstruated at 15 years. Married at 18; have been pregnant three times. Upon the first menstrual discharge I bathed myself with cold water, which produced immediate suppression; menses did not appear subsequently for three months, when it was restored as to frequency, but irregular as to quantity, being unwell generally one day and night. The above suppression brought on, resulted in chills and fever, followed by a low form of intermittent fever. About 18 months after, so far recovered as to be able to go to school. The pain that generally attended menstruation began now to be very much worse. I had two miscarriages, at seven months each; have only one living child; two first pregnancies resulted in miscarriages; the child now living is two years old in March. I have suffered greatly with pain and cramping of the womb; the pain, after the monthly period has left me, is worse than that during the period of menstruation; the pain is as severe as that of last labor-pains; sometimes it is not relieved until the monthly period comes round again; bowels generally loose when the pain is on me; it produces also a griping pain in the bowels. The condition of my bowels has been very severe; in fact, they always have troubled me when I have pain in the womb; as the paroxysm of pain is better, the bowels become regular; at the time the pain is on me the bowels become very painful to the touch, so much so that I can hardly suffer myself to be covered with the bed-clothing; the soreness of the bowels will sometimes come on in a few minutes. I am continually troubled with cold hands and feet; have been blistered, bled, cupped, narcotized, salivated, etc., times indefinite; have been attended by fifteen different physicians, without having been benefited; two or three physicians often with me one and two days at a time."

The treatment was upon general principles, but I relied most upon the irritating plaster, the directions of which were as follows:—

Directions.—You will apply the irritating plaster upon your side and back; apply the plaster marked for the side, just in the iliac region, or above the hip; the other just opposite, on the back, or, rather, inside of the spine, to the right, allowing the plaster to cover the spine, but to extend considerable further to the right side than to the left. These plasters you will let remain on for three days, and if, by that time, they have not produced a severe soreness, you will prepare two more, and apply the same way; these to remain on as long as they can well be borne, when you will remove, and if they are discharging much, you will apply flax-seed poultices to the parts; these to be changed twice per day until all the discharge is stopped; then apply a plaster of Mayer's Ointment, twice per day, until all the soreness is gone; let it remain so for about two or three days, then spread and apply the irritating plaster again, to be subsequently treated as before.

I received the following letter from her husband, dated Dec. 1st, 1859, saying:—

"Please send me some more medicine. My wife is much better; she experienced great relief."

I received another letter, Feb. 7th, 1860, as follows:—

"The reason I have not written you before is, I have been waiting to see if I would be sick again; have not been for two months, and think I will not be again. Doctor, I can't feel thankful enough to you for the medical aid I have received from you."

After writing the above facts in favor of the irritating plaster, when properly used for the cure of chronic diseases, I would say, Messrs. Editors, I could fill your journal with detailed accounts of cases that I have treated in private practice, that perhaps had been attended by the very best medical friends, and who had most signally failed in giving any relief, which were as successfully treated as the above cases; diseases which, in my opinion, I could not have relieved, had I not resorted to the use of this invaluable means of counter-irritation, and would here verify the very enthusiastic terms that our lamented friend

Professor T. V. Morrow, was in the habit of employing in his reference to its uses, at least once during each session. When about to make an allusion to the article, he was in the habit of commencing in about this style:—"Gentlemen, I am going to speak of a plaster, which is called the Irritating Plaster, and which, in point of usefulness, surpasses all others in the cure of chronic diseases, considered by many incurable. After having collected all the plasters in the universe, and having piled them on one side of a scale, and putting a very reasonable portion of the compound Tar Plaster on the other side, there will be no kind of comparison."

Such has been my experience, and as much as I may deprecate one-idea of medicine, or that any one should ride a hobby, I can not here close my article, without strongly recommending the reader, whenever he has a deeply-seated difficulty, which is of long standing, and being unable to give relief, to try the effectual use of the irritating plaster, if counter-irritation is indicated.

PART SECOND.

SELECTIONS.

The Relative Value of the Different Methods of Amputation of the Leg as regards Mortality and the subsequent Utility of the Limb. (Translated from the German, by Alfred Weiller.)

Dr. Boeckel, of Strasbourg, has taken this question into consideration, having published a pamphlet entitled "Les Avantages et les Inconvéenients de l'Amputation de la Jambe au lieu d'election comparee aux Amputation sus Malleolaire et partielles du Pied."

He states that all the statistics lately collected by different authors go to prove the superiority of the supra-malleolar amputation (from the commencement of the lower third to the malleoli) joint; showing that the mortality of the latter is double that of the former. (Fenwick says the relative proportions are 1 in 4.5 and 1 in 2.5.) This decided difference in favor of the first method Dr. B. attributes—

(1.) To the wound being further away from the body.

(2.) To the surface of the wound being smaller; and

(3.) To the comparatively rare occurrence of pyæmia and phlebitis.

As regards the utility attainable subsequent to these operations, Dr. B. thinks the advantages are decidedly on the side of the supra-malleolar amputation, as there is a far better support for artificial contrivances. It is true that some patients, after the latter operation, have to leave off their artificial foot and resort to a wooden leg, in consequence of ulceration of the stump; but in the majority of cases, Dr. B. attributes this to the badly constructed apparatus, in some of which, for instance, the *end of the stump* is made the point of support. And even in those cases where, on account of the tenderness of the stump, and inclination of the same to ulceration, no other apparatus can be used than the wooden leg, the disadvantages and inconveniences arising from the supra-abundant length of the stump are not so great, but that they are compensated by the difference of mortality, which gives this operation so great an advantage over the higher one.

As regards the operation in the middle third, Dr. B. thinks, without, however, being able to bring any facts to bear upon his opinion, that the large surface of the wound is just as dangerous as in the higher amputation. And, as the stump is not more adapted to an artificial foot, and less so to a wooden leg, he prefers the operation in the upper third to this.

In tibio-tarsal exarticulations, according to good statistical authorities, the average mortality is 1 in 7·2 operations. Out of thirty-two cases cited by Dr. B., four died consequent upon the operation, gangrene of the flaps ensued in three, and in four the caries returned. Out of the two last categories, five cases went through secondary amputation of the leg in loco electionis; ten patients could, after cicatrization of the flaps, use their stumps to more or less advantage; ten could, after some time, walk on the stump without any inconvenience. Dr. B., consequently, comes to the conclusion that this operation is far preferable to the amputation of the leg, provided there is no particular danger of the return of the caries; although, in the former operation, cicatrization goes on slower, and necrosis and suppuration of the sheaths of the tendons take place oftener than in the latter. He also prefers the planta-flap, of Syme, to the dorsal, of Bouden.

The exarticulation below the astragalus, and Pirogoff's operation, are not sufficiently numerous as to allow of a definite conclusion. Dr. B. speaks of seven cases of the first, all of which terminated favorably; and of nine of the latter, one of which was fatal.

In Schopart's operation, the average fatality is one in nine. As regards the usefulness of the limb after this operation, out of thirty-three cases, seven could walk tolerably well immediately after the healing of the wound; in seven, the same result was attained at a later-period. In most of the remaining nineteen cases, organic disease of the joint set in about th period of cicatrization, (in some later); *in all*, retroversion of the heel took place, which interfered more or less with locomotion; in five, secondary amputation was performed, in consequence of returned caries. From further observation of these nineteen and other similar cases, Dr. B. infers that the retroversion of the heel *depends least upon the contraction of the gastrocnemius*, as in most cases the division of that muscle failed to remove the difficulty; and only in part does it arise from inflammation of the tibio-tarsal joint and the deep-seated muscles of the leg at the period of cicatrization. The chief cause, however, is, in his opinion, the action of the weight of the body upon the astragalus, and, consequently, in walking, it is dislocated forward. The highest degree of retroversion he attributes to the relaxation of the articular ligaments. This opinion has been confirmed by experiments upon the subject. His advice is, therefore, not to choose this method in cases of organic articular disease; when, however, this mode is used, the astragalus should be kept, during the period of cicatrization, in a strongly-flexed position; the patient should not be allowed to walk for some time, and then only with a boot the sole of which is considerably hightened in front.

The amputation at the metatarsal bones, and Lisfranc's tarsometarsal exarticulation, produce better results than all other partial amputations of the foot.

The exarticulation between the os naviculare and os cuneiformis, can not now be passed upon.—*Medical Gazette.*

The Cure of Varicose Veins. (From the Lancet.)

A man, aged about thirty-five years, was recently admitted into University College Hospital, with a varicose condition of the veins of the left leg and thigh, associated with a varicose ulcer. From the latter a good deal of blood had been lost lately, and much inconvenience was felt from the presence of several knots and clusters of tortuous veins extending up the inner side of the thigh. The dilated vessels running up the leg to the middle of the thigh, were of considerable size. Two pins were placed beneath the veins above and three below the knee, and the usual sutures applied over a small piece of bougie, on the 19th of October; this was done without chloroform being given. The varicosed knots were reserved for a future occasion for injection with the solution of the perchloride of iron. A week later, the veins were found to be obliterated, and the effect of this was to diminish the venous knots already referred to. The ulcer had completely healed. Finally, some of the dilated veins were injected with the solution, but not the others, as coagulation had taken place within them. This was followed by some inflammation and an abscess, with a little constitutional disturbance, but the man has gone on well.

We saw some remarkably large varices at the above hospital on the 16th ult., situated at the inner side of the left thigh of a man of sixty, who had a varicose ulcer of both legs, in which the veins were in a varicosed condition. Three pins above and three below the knee of each leg were placed in the usual manner under the veins, and complete obliteration has ensued, with a cure of both ulcers. A second case of varicose veins and ulcers of both legs was submitted to the same treatment, in a man whose constitution was broken down; two pins below each knee, and one above the left knee, were introduced. It is important to observe that this patient had been similarly operated upon three years ago, on his left leg, with a cure of the varix at that time; but the present knot of enlarged veins was an entirely fresh batch. There can be no doubt that in the majority of cases, the veins operated upon are completely obliterated; but we believe, with Dr. Pirrie, of Aberdeen, that a permanent cure of the tendency to varix is not accomplished, and that in many cases, sooner or later, the varix returns in some other veins.

The obliteration of varicose veins we saw also attempted at King's College Hospital, on the 22d October, by Mr. Fergusson, the subject being a young woman, a housemaid, who was much upon her feet, and the veins of whose left leg were enlarged and tortuous. A pin was passed underneath a large vessel at right angles to its trunk, and another was introduced through the vein itself, in the direction of its length, so that some amount of inflammation might be induced; a twisted thread was now passed round the pins, with the effect of producing obliteration by the compression thus established.

Therapeutic Properties of Gelseminum. By A. F. Pattee, M. D., of West Amesbury, Mass.

The Gelseminum Sempervirens, or yellow jessamine, grows wild in the Southern States. For further particulars of its botanical history, the reader is referred to the various works upon botany. This medicine was introduced to the notice of the profession by a Southern planter, who employed it in fevers, he having used it with marked success on his own person and others.

Active Principle of Gelseminum.—The virtues of Gelseminum reside chiefly, if not exclusively, in a peculiar organic principle called *gelseminin*, which is said to satisfy all the indications of the plant.

Effects upon the System.—Numerous articles have been published on the subject of Gelseminum within the past three years, throwing much light upon its physiological and therapeutical action. From the results of recent observations and experiments, I am disposed to think that it can well rank as a direct sedative to the nervous system, and secondarily to the circulation, while it occasionally acts as a diaphoretic and diuretic. Applied to the skin, it first occasions a slight feeling of heat, which is soon followed by a little numbness; when taken into the mouth, in a concentrated form, it often occasions dryness of the mouth and fauces; when applied to the eye, it causes dilitation of the pupil, an effect which I have witnessed upon myself and others. Given internally, in small doses, repeated two or three times daily, so as to bring the system gradually under its influence, the first effect usually noticed is an agreeable and diffusive feeling of comfort, followed, perhaps, by slight vertigo, or other uneasy sensations in the head, and a slight reduction of the pulse. From larger quantities, the effects are more quickly induced, and are more severe. If more frequently repeated, dimness of vision, dilated pupil, general muscular weakness, and a feeling of inability to move or speak, takes place, with syncope in many cases. The pulse is reduced fifteen or twenty strokes per minute, and the respiration accordingly, with a general condition of muscular and nervous prostration, which may continue for hours or even days. This condition, however, soon passes off by giving from one to five grains of quinine with a teaspoonful of wine, every three hours, or from ten to twenty drops tincture of opii every four hours, leaving the patient in a gentle perspiration, with a feeling of comfort and ease.

A peculiarity in the operation of Gelseminum is, that while it diminishes both general and special sensibility, consciousness is usually in no degree impaired. No nausea or vomiting is ever occasioned by the medicine. As to narcotic properties, which have been ascribed to it by many, I have not been able to distinguish any effect upon the system that would lead me to conclude that it had any peculiar action but what could be attributed to its other properties. Carbonate of ammonia, opium, quinine, iodine and brandy, are antidotes for an overdose, which may be given as occasion may require.

Therapeutic Application. — The general application to which Gelseminum is suited, through its sedative properties, to fulfill, is to reduce morbid excitement of the nervous and circulatory systems. Hence it will be found useful as an anodyne, antispasmodic and antiphlogistic remedy. In all cases of acute inflammation, especially when attended with fever, Gelseminum may be advantageously used; but it is in *fevers* and *pectoral affections* in which it has enjoyed the most reputation. In all the *idiopathic fevers*, with a sthenic or asthenic state of the system, Gelseminum is very useful, by diminishing the febrile symptoms, promoting secretions, especially of the skin, and quieting nervous excitement.

Dr. Nash says: — "I have used the article in every case of idiopathic fever that has fallen under my treatment within the last six months, with perfect impunity, and with the most desirable results: age and sex not affecting its exhibition."—*Jour. of Mat. Med.*, April and May, 1858.

As regards the effect of Gelseminum in this class of diseases, it would seem, from the promptness of its action, to have a direct effect upon the morbid condition of the system, or cause that produces the disease.

Typhoid or enteric fever is a disease in which Gelseminum exhibits, probably, its most extraordinary powers; and if medical reports can be relied upon, it would seem that the disease was easily managed by the new remedy. But I have met with cases, now and then, which resisted its influence, and doubt not others have; therefore, we can not look upon it as a specific in this disease, or a remedy superior to veratrum viride, in all cases.

Dr. Nash writes:—"I have, in two instances, succeeded in relieving patients within twenty-four hours, whose cases presented all the primary symptoms of veritable *typhoid fever*."

Dr. Miller writes:—"I am perfectly well satisfied that Gelseminum will cut short typhoid fever, when given early in the disease." Very soon after the system has come under the full influence of the remedy the pain in the head abates, sleepiness is relieved, and the pulse reduced in frequency and force; inflammation of the internal organs is stayed, and the patient, in most instances, enters into convalescence in from six to ten days from the commencement of treatment.

Yellow Fever. — Gelseminum has been employed at the South in this disease, instead of quinine, to suppress the fever by its sedative influence. Among those who report most strongly in its favor are Drs. White and Ford, of Charleston, South Carolina, who found it very effectual in cases characterized by great irritability of the stomach. The total number of cases treated by them with Gelseminum was twenty-four. Of the whole number treated, two vomited black vomit, five passed black vomit downward; in three cases hemorrhage occurred from the tongue, gums, or nasal passages. One woman was in the sixth month of her pregnancy, and did not abort. No marked prostration was caused by this remedy.

In diseases of the heart and arteries, this remedy may be used with advantage; in *hypertrophy* of the heart, without valvular disease, the result of irritation, it is an admirable remedy; also in functional palpitation of the heart, dependent upon plethoric, anemic, or nervous disorder.

It has been recommended in *inflammation of the brain*, *angine bronchitis*, pneumonia, and the inflammatory conditions of scrofula and phthisis. Hæmoptysis also offers an indication for the use of this remedy, which may be given to reduce the action of the heart when there is active arterial excitement.

I have used the remedy in *convulsions* and tetanic spasms, and in some instances these diseases have been averted by its timely use. *Headache* of the nervous kind may often be relieved, and I have found no one medicine so useful in this troublesome disease. *Neuralgia*, in its various forms, may be treated with this remedy, both internally and externally, with the hope of benefit. In coryza, or *cold in the head*, this is one of the best remedies I have ever used; it cures the severest cases in from twelve to forty-eight hours. It is said to be useful in *intermittent fever*, especially when combined with quinine, or followed with quinine after the pulse is reduced.

Preparations: Powder, infusion, decoction, fluid extract, tincture and gelseminin.—The fluid extract is a standard preparation, and from it most of the other preparations can be made—the *tincture*, by adding ℨ iv. of the fluid extract to a pint of diluted alcohol. M., and digest fourteen days, then filter. The dose of the fluid extract is from two to twenty drops; tincture, from twenty to sixty drops; gelseminin, half to two grains, repeated once in three or four hours, till some observable effect is produced upon the pulse, or until it is reduced to sixty-five or seventy beats per minute.

I was informed by a physician of Concord, N. H., that a convict in the State Prison swallowed one and a half ounces of the fluid extract, with intent to poison himself. The effect was great prostration, nausea and vomiting, dilated pupils, inability to speak or move, coldness of the surface, etc. The effects passed off, with proper antidotes, in about twenty-four hours.—*Journal of Materia Medica.*

On the Selection of Food in Diseases. (Translated from Moleschott's "Physiologie der Nahrungsmittel," for the E. M. & C. JOURNAL, by T. L. A. GREVE, M. D.

Selection of Food in Inflammatory Diseases.—In inflammation, the amount of fibrin in the blood is considerably increased. Andral and Gavarret found it to be 7.5 parts in a thousand, as the average of all their experiments. In acute rheumatism, the average of all analyses by Andral and Gavarret is 6.7. In inflammation of the brain, produced by external violence, Popp found from 4 to 8 parts of fibrin in a thousand. Simon saw in inflammations, also, the quantity of albumen in the blood increased; and Lerch found in inflammatory serum, oftener an increase than a diminution of it. As now, according to Lehmann's observations, made on himself, the fibrin of the blood is increased to 6.6 parts by animal diet, it follows as a rule, based on rational principles, that animal food is to be avoided in all really inflammatory diseases. The absolute withholding of all solid and liquid food produces, however, just like animal food, an increase of fibrin. Abstinence, therefore, can only be useful, when, by abundant supply of drink, the amount of water in the blood is increased, and thereby, indirectly, the quantity of its albuminous constituents decreased. Copious drinking of water has also the advantage, that it favors metamorphosis. In fever, accompanying inflammation, the amount of sulphates in the urine is diminished, and this is a sure sign that the oxidation of the albuminous substances of the body is impeded. According to Lehmann, "there is no acute disease, in which the oxidation of the constituents of the blood is not diminished or retarded." This fact explains partly the good effect of cold water, infusions, and other beverages, when taken in large quantities. Beside these beverages, only easily digestible, not very nutritive vegetable food, at the most very thin meat-soup or milk, diluted with more or less water, should be allowed.

In acute inflammations of the nervous tissue, according to Bence Jones, the amount of sulphates and phosphates, excreted in the urine in 24 hours, is increased. The spare diet required in these diseases, can only be accounted for by the fact, observable in all acute inflammations, that the augmentation of the solid constituents of the blood increases the congestion in the inflamed parts. For the same reason, in acute inflammations, all kinds of food, condiments and beverages, which excite the heart to greater activity, should be carefully avoided, especially stimulating spices, alcoholic liquors, and coffee. Weak tea is generally harmless, but strong tea should not be given, because it impedes metamorphosis.

Particular organs, affected with inflammation, require precautionary measures in the use of food and drink, which follow from their physiological properties. An exaltation of the function of a gland is not conceivable, without it is in a state of congestion. Thus, in inflammation of the kidneys, all articles of food, rich in salts and acids, should be avoided with special care; in inflammation of the testicles, all roots, containing an acrid, volatile oil, fish, vanilla, etc.

Selection of Food in Fevers which do not accompany Pure Inflammations.—Those fevers which do not occur as articles of food, by which a considerable quantity of iron is brought into the organism, must also be useful. In this category, good meat, especially venison, rich in blood, takes the first place. Especially useful proves to be the yet bloody meat of a roast, in the preparation of which the temperature in the interior remained below 70°, as shown by the bloody condition, for the red color of hæmatin is changed into brown at 70°. Some preliminary experiments, which Mr. Hirt of Solothurn, made in my laboratory, teach, however, that the mixture of globulin and brown hæmatin, coagulated by heat, is also soluble in artificial gastric juice. Beside meat, deserve especially the yolk of eggs, and, when the digestive organs are properly active, beans, lentils, spinage, and liver, to be recommended in chlorosis.

As common salt favors, directly and indirectly, the formation of blood, and especially the development of red corpuscles, food rich in salt is advisable in this disease.

Selection of Food in Scurvy.—The changes of the blood, which occur in scurvy, have not yet found their chemical expression. Neither the diminution of fibrin, nor the increase of salts, which were said to dissolve the fibrin, has been confirmed. We must, therefore, at present give up the flattering explanation of the injurious effect of salted food, which, it was claimed, diminished the amount of fibrin by increasing the salt in the blood; an explanation to which is opposed, beside Lind's assertion, that great quantities of salt agree with scorbutic patients, also an observation of Woodward, who cured an eminent English lawyer, who had from prejudice for several years entirely abstained from the use of salt, of a violent attack of scurvy, by salt and wine. Altogether, the remedies, which are recommended against scurvy, are not calculated to lift the vail which covers this disease. Fresh vegetables, lemon-juice, citron-juice, the fruit of cactus, sourkrout, potatoes and beer, which are recommended as useful, might owe their effects to the presence of organic acid, which is common to all. Vinegar, however, does not prevent scurvy in sailors; and Lind, Monroe and Wilson report cases in which the abundant use of vegetables produced scurvy, which was cured by a meat diet. Decoctions of amphibia are said to be very salutary in scurvy. Garrod ascribes antiscorbutic effects to the potassa of food; in the blood of a scorbutic patient he found the potassa reduced to one third of its normal amount. The above named articles, especially potatoes, lemon-juice and orange-juice, contain, indeed, potassa, as the analyses of Garrod prove. Garrod has further shown, that the amount of potassa is lessened in salted meat. He has given different potassa salts to scorbutic patients—the bitartrate, acetate, carbonate and phosphate—and found them all equally advantageous. This would, indeed, account for the utility of vegetable food, in which potassa generally predominates, in the simplest manner, if we could refer to more than *one* determination of potassa in scorbutic blood. In the cases of Lind, Monroe and Wilson, were, perhaps accidentally, the vegetables poorer in potassa than the meat, which, as Liebig has shown, is rich in potassa; and in Woodward's case, might perhaps the wine, with its bitartrate of potassa, and not the common salt, have effected the cure. A decisive opinion we will only be able to give, when we shall be in possession of a greater number of analyses of blood-ash, the constituents of which have hitherto been too much neglected by pathological chemists.

Selection of Food in Rhachitis.—The distinctions which have been made between bones softened by rhachitis and by osteomalacia, have been demonstrated by Henle to be unessential. It is of great interest, from a dietetic point of view, that the quantity of phosphate of lime in such softened bones is constantly diminished. Schlossberger has examined the cranial bones in the so-called soft occiput of children. While the normal bones of the occiput contain, during the first year, never below 60, and generally above 63 p. c. of inorganic constituents, Schlossberger found in the thinned parts of craniotabic bones only 51-53, in the abnormally thickened parts only 28, in less severe cases 40-43 p. c. of inorganic substances; 55 p. c. designated the limit between healthy and diseased bones. Cases occur in which the amount of inorganic substances is diminished below ⅛ of the normal quantity. The per centage of carbonate of lime, as compared with the earthy phosphates, is, according to Schlossberger, normal, or somewhat diminished, with which the statements of Bostock, Marchand, Lehmann, and others agree, while Prosch has found the carbonate of lime augmented. The organic basis of bones has been found changed by Muller, as it consisted neither of glutin nor of chondrin; on the other hand, Ragsky, Dreux, Gerster, and, more recently, Schlossberger, found the glutin unchanged. In osteomalacia is, according to Lehmann, the amount of fat in the bones considerably increased.

That this deficiency of phosphate of lime in the bones must be ascribed to a deficient supply of this salt in the food, and to its consequent deficiency in the blood, may be doubted, for the reason that in the above named diseases an abundant quantity of the phosphate is excreted with the urine. Lehmann's theory, that the too abundant formation of lactic acid is the cause of the solution of the bone-earth, which is then taken from the bones, and excreted with the urine, has received considerable support by an observation of C. Schmidt, who found in sof ened bones acid lactate of lime, from which he obtained the lactic acid as a zink salt, which, although too small in quantity to make an elementary analysis, gave the proper amount of oxide of zinc in the determination of its equivalent. Marchand has, even before he knew this fact, based on the theory, prohibited the use of milk in rhachitis; and if Elsasser found the soft occiput principally in children, who never, or only for a short time, received the mother's milk, Schlossberger justly refers to the considerable quantity of phosphate of lime, which the above mentioned children were deprived of with the milk. Nevertheless, Marchand's advice should be well observed, as a supply of the phosphate of lime may be given without the direct or indirect addition of lactic acid. Indirectly, lactic acid is furnished to the organism in amylaceous substances, and this may be the reason, that in scrofula, which so frequently accompanies rhachitis, potatoes and all articles rich in starch, must be pronounced injurious, in accordance with the most extensive experience.

The want of phosphate of lime in the bones is an established fact, and experience has proved that medicines and articles of food rich in salt, improve the nutrition of the bones, whether the want of nutrition depends on a deficient reception of bone-earth into the blood, or on its increased excretion with the urine. On another occasion, I have already referred to the observation of Mulder, who saw the proneness to fractures in a whole family disappear, when they took for a while, in place of potatoes—which formerly constituted almost their exclusive food—nutriment in which phosphate of lime was sufficiently represented. The beneficial effect of cod-liver oil, in rhachitis and scrofula, depends, doubtless, to a great extent, on the bone-earth it contains. The want of phosphate of lime would be remedied most readily by wheat and rye bread, peas and beans, or by milk, if not the formation of lactic acid from the starch, the dextrin or the different kinds of sugar of those articles were to be feared. Therefore, a diet consisting principally of meat, deserves the preference in these conditions, especially the meat of grown animals, as beef is richer in phosphate of lime than veal; still more beneficial is the yolk of hen's eggs.

Selection of Food in Diabetes Mellitus.—The sugar which is excreted in diabetes may, like fat, be referred to a double origin, to an excessive supply, and to deficient transformation. The too abundant supply of the sugar may originate either directly from the food, or indirectly from the formation of sugar in the liver; the deficient transformation is either the result of imperfect digestion, or of an incomplete regressive metamorphosis of the sugar. Four different causes of diabetes are, therefore, conceivable; and observations have been made which indicate that any of these four causes may be the active or co-operative one.

However ignorant we are, in a particular case, of the place where, in diabetes mellitus, the normal transformation of the sugar is prevented, and however rarely, if ever, any kind of diet has led to a complete cure of the disease, we may safely assert, that the diminished ingestion of amylaceous substances will decrease the amount of sugar appearing in the urine. Though we can not deny the possibility that also albuminous bodies may change into sugar, it is known that the transformation of starch and dextrin into sugar takes place at any rate much easier than that of albumen. Pereira observed, during a purely animal diet, a considerable diminution of sugar in the urine of diabetic patients; Van den Brock saw the sugar even entirely disappear. As now, according to Traube's observations, the digestion of fats proceeds properly in diabetes mellitus, and as fat can, doubtless, to a great extent, take the place of the fat-producing substances of the food, moderately fat animal diet might, perhaps, be the most advantageous for the sustenance of diabetic patients. Cabbage, spinage, cresses, and similar vegetable articles, which contain comparatively little sugar and starch, may be used with it. This point is of importance, for the reason that exclusively animal food is apt to produce loathing in a short time, in persons accustomed to mixed diet. To avoid this aversion, Bouchardat has recommended his gluten-bread, from which the greater part (about 4-5) of the starch has been removed. But the remaining starch is, perhaps, sufficient to supply the blood and the urine with the whole amount of sugar, which is considered the most essential symptom of the disease. Percy's "bread" has not this disadvantage, but as it consists principally of eggs, fat, common salt, carbonic acid and some cellulose, with some traces of starch, it does not deserve the name of bread; and as, according to my experience, it is beside not very palatable, it does not fulfill the indication of an agreeable change of food, and should not be put in the bill of fare of diabetic patients.

Selection of Food for Patients afflicted with Calculi.—There are few diseases in which the physician has applied to the physiological chemist with as much confidence as in the formation of calculus'; and yet in this case, also, science can give but few hints to the practitioner, the observance of which has at least not often led to a radical cure. In the dietetic treatment of patients with calculi, attention has hitherto been principally directed to the substances peculiar to urinary calculi without taking much notice of the organic cement which forms the concretions from these substances. Generally, however, the constituents characteristic of the different kinds of calculi are the most difficultly soluble. We will, therefore, in the following, weigh the beneficial and injurious effects which particular articles of food may have in the deposition of such bodies in the urine.

These substances are principally uric acid or urates, oxalate of lime and earthy phosphates. We are acquainted with a uric acid, or so-called arthritic diathesis. Garrod states, that in chronic gout he found uric acid in the blood, and Bence Jones has corroborated his statement. Uric acid is also found in great quantity in the urine, in the synovia, in the cartilages of the joints, in the so-called nodules, (here mostly combined with bases), in anthritic ulcers, in the sweat, and Bramson found uric acid once in the ossifications of the arteries of a gouty patient.

The uric acid diathesis may be caused by too abundant supply of albuminous food. This is shown by the injurious effect of too luxurious living, in gout and calculus-disease; but it may also depend on deficient oxidation of the uric acid; and this is proved by the effect of wine in gout and the formation of calculus, when the latter consists of uric acid. The formation of calculus from uric acid, may finally take place when the uric acid, without reaching the bladder in excessive quantity, passes into the urine in a difficultly soluble form, so that concrements of it accumulate in the bladder. In the latter case, it must be useful, to give to the urine as strong an alkaline reaction as possible; and as this is effected by a vegetable diet, and as, further, the formation of uric acid is impeded by the use of nutriment poor in oxygen, vegetable food containing but little albumen, should be chosen, whenever the calculi consists of uric acid and biurates. At the same time, all articles should be avoided which, by appropriating much oxygen, might impede the oxidation of the uric acid, such as fat, alcoholic liquors, coffee and tea. The statements of Camper, Van Geuns, Sinclair, Thysson, and others, that, in Holland, since the more general use of tea, calculi have become less frequent, requires probably strict statistical investigation; and even if this should be in favor of the assertion of these physicians, it is still hazardous to decide on the causal connection of those two facts. According to Kæmpfer, gout and urinary calculi are rare in China also, which he likewise refers to tea-drinking. The diuretic effect of tea may assist in the solution of calculi consisting of uric acid, urate of ammonia or oxalate of lime, as the urine becomes more watery, and as uric acid is not quite insoluble even in cold water, urate of ammonia, soluble in 500 parts of water and oxalic acid not completely precipitable by lime-salts. The frequent use of tea is, perhaps, advantageous, merely by limiting the use of decidedly injurious beverages—of wine, for instance. Vegetables containing much free organic acid, are objectionable in uric acid calculus, because they can make the urine acid, and appropriate part of the oxygen, which could have been used for the combustion of uric acid, into urea and carbonic acid; the organic acid burns at least partly into carbonic acid and water, without the carbonic acid meeting with a base to combine with. Therefore, pears deserve, among the various kinds of fruit, in uric acid diathesis, the most recommendation; next, apples, grapes, plums and pears, while the use of currants, mulberries, gooseberries, raspberries and strawberries, is to be prohibited. This agrees with the statement, that, in countries where beer is drunk, calculi are of rarer occurrence than in wine countries, as beer contains not only less alcohol, but generally also much less organic acid than wine.

As oxalate of lime is soluble only in mineral acids—nitric and hydrochloric—the formation of calculi, produced by this salt, can only be negatively counteracted by dietetic treatment. All articles of food containing oxalate of lime or oxalic acid, should be withheld from the patient; also, the different species of rumex, rhubarb, the berries of berberis vulg. and sinensis, etc. Magendie observed a case, in which the excessive use of sorrel caused the formation of an oxalate of lime calculus, which was thrown out with the urine after severe pain in the region of the kidneys. The formation of calculus did not occur again, as the use of the sorrel was discontinued. Oxalic acid may, however, like uric acid, appear in the urine, in consequence of deficient oxidation. Where this is suspected, the same dietetic rules are to be observed as indicated in uric acid diathesis. In dyspepsia, induced by sedentary life, sediments of oxalate of lime are often noticed in the urine. When uric acid is incompletely oxidized, it gives rise beside urea and carbonic acid, also to oxalic acid. Favoring respiration is, therefore, the most important auxiliary to proper dieting.

For the treatment of patients with concretions, consisting of earthy phosphates, it would be important to know if the acetic acid of food passes unchanged into the urine, as the ammonio-magnesian phosphate as well as phosphate of lime are soluble in that acid. The abundant use of vinegar is said to have been found useful in cases where the sediment consisted of earthy phosphates, and therefore part of the acetic acid passes probably into the urine, although another part is certainly oxidized into carbonic acid and water. At any rate, the occurrence of alkaline reaction in the urine should be prevented as much as possible; therefore, animal diet is to be recommended as the predominating one, and from vegetable articles of food, especially those should be selected which are rich in free organic acid, as currants, mulberries, lettuce seasoned with much vinegar, and sourkrout. For the same reason, whey and acid wines will be found useful.

Selection of Food during Convalescence.—In the convalescent stage of every acute disease, there is a state of inanition. According to the observations of Chossat on animals, and of Franklin on himself and his companions, only small quantities of nutriment can be borne at first, in inanition. Therefore, the old rule, that convalescents should be allowed food only in gradually increased quantities, is well founded. The quantity of the digestive fluids is diminished in inanition. Hence it follows, that the diet should be easily digestible, while the impoverishment of the blood requires nutritious food. These two conditions are best fulfilled by such vegetable articles which, as many green vegetables, contain soluble albumen and not many amylaceous substances, or by meats, in which soluble albumen is more abundantly represented than fats. The thymus gland of calves, the meat of chickens, oysters, meat-soups, (and among these more especially that prepared from chickens), and skimmed milk, are particularly suitable for convalescents, whose strength is to be invigorated. All articles difficult of digestion, liver and fish, on account of their phosphorized oils, pastry and pork, milk rich in butter, heavy bread; in short, all kinds of food containing nutriments which are difficultly soluble, or pass slowly into blood constituents, are carefully to be avoided.

I must, however, based on my own experience, agree with Marrotte, when he demands that true hunger should always be noticed without immoderate dread of vascular excitement and torpidity of the stomach; and Peorry, also, is right, when he teaches, that frequently want of appetite and inability to digest are not always synomymous terms; so that many patients might die of inanition if we would always wait with the exhibition of food until the desire for it was clearly expressed. Especially true is this of children, who sink much easier from inanition than adults. Even in acute diseases, we have to use great care in prescribing a scanty diet for children.

PART THIRD.

CLINICAL REPORTS.

Newton's Clinical Institute.— Winter Session of 1859-'60.
Services of Prof. R. S. Newton.

REPORTED BY JAS. A. HENSHALL, M. D.

Case 617.—Oct. 18. M. Beard, aged 44. *Cancer.* Mr. Beard has been afflicted for several years with a Scirrhus Cancer, situated upon the lower lip. The cancer is quite extensive, occupying the whole of the lip, and slightly encroaching upon the chin. He had applied to several physicians, but with no benefit. He has been under the treatment which I shall presently notice, for several weeks, with marked improvement, and will ultimately be cured, by a further continuance in it.

"How did this cancer commence, and when did you first notice it, Mr. Beard?"

"It commenced, sir, about two years ago, and resembled a small wart."

"Was it slow or rapid in its growth?"

"It grew very fast, sir."

"You say you applied to several physicians. What was the manner of their treatment?"

"The first one, to whom I applied, split my lip open, which caused a running sore. I then went to another one, who attempted to cut the cancer out, but he only removed a part, since which time it has spread very rapidly."

"Did you take any internal remedies?"

"Yes, sir; I took a great deal of medicine, among which were calomel, arsenic, etc."

This, gentlemen, is the way that cancer is treated by most physicians, and with about the same success. They think it is incurable, yet they try to cure it. But, I will give you a plan of treatment that has proved very successful in my hands, and will in yours, if properly applied. The treatment that this patient has been under, consisted of an application of the chloride of Zinc Paste, the formula being as follows:—

℞.—Zinc. Chloridi, ʒj.
Pulv. Hydras. Can.
" Ulmi Fulvi, *aa* ʒij. M.

This being thinly spread on a piece of cotton cloth, and applied, followed by a slippery elm poultice. He has also been taking internally—

℞.—Comp. Syr. Stillingiæ,

a teaspoonful three times a day.

Nov. 11.—Gentlemen, you now see the effects of the treatment, which I propounded to you, when this patient was first brought before the class. The entire cancer has sloughed, leaving a healthy base, with newly forming normal granulations. You can now see for yourselves the success of this treatment, which is doubted by so many of our medical brethren, who maintain that cancer is incurable. This case speaks for itself.

Case 618.—October 25. Elizabeth Naylor, aged 38. *Chronic Hepatitis.* Has been laboring under an affection of the liver for several years, which viscus is now considerably enlarged.

"How long, Mrs. Naylor, has this condition existed?"

"About two years, sir."

"Did you have much pain, when it first troubled you?"

"Yes, sir, I had a bad pain in my right side, and shoulders."

"Did you take medicine for your difficulty?"

"I took a great deal, sir, of pills and powders, and was rubbed on my side with lotions."

There is no doubt in my mind, gentlemen, but that this poor woman has been shamefully dosed with calomel. Her teeth are decayed, and gums swollen and spongy, together with a very fetid breath, which are almost absolutely certain symptoms of the pernicious effects of this article. I would here say that a great majority of cases of affections of the liver, are caused by the administration of this drug, and to cure which diseases, calomel is again the agent which is administered, thus simulating the homeopathic dogma—*similia similibus, curantur.*

"My good woman, do you now have any pain in your side?"

"Yes, sir, and in my back and shoulders."

"How are your bowels?"

"They are very costive, all the time."

"Do you have much thirst?"

"Yes, sir, very much at times."

"Which side do you lie upon, at night?"

"Upon my right side; I can not lie upon my left side at all."

"How is your urine?"

"It is scanty, sir, and very yellow."

This, gentlemen, you see, is a clearly marked case of chronic inflammation of the liver, for which I will order the following:—

℞.—Podophyllin, Leptandrin, *aa* grs. xx.
Irisin, grs. xv, Morph. Sulph. grs. ij.
M. Ft. Pil. No. xx.

Take one pill morning and night.

℞.—Comp. Syr. Stillingiæ, ℥iv.
Potass. Iodidi, ʒij. M.

Take a teaspoonful, three times a day.

Nov. 8.—Improving rapidly; the liver much reduced in size, and not so much pain; bowels regular.

"How do you feel, madam?"

"I have not felt so well for years, sir; I am sure, sir, I feel very thankful to you."

Continue treatment.

Nov. 25.—Discharged, cured.

CASE 619.—Oct. 25. JAMES POPE, aged 34. *Chronic Diarrhea and Rheumatism.* Was attacked by rheumatism six months ago, and confined to bed for several weeks. At present has not much pain, but joints inclined to be stiff. Pulse 110, and full.

"Mr. Pope, how long have you been troubled with this diarrhea?"

"About a month, sir."

"How many operations from your bowels do you have during the day?"

"A great many, sir; from twenty to thirty."

"Do you feel any pain or griping in your bowels?"

"No, sir."

"How is your appetite?"

"My appetite is very good, sir; but when I eat anything, it passes right through me, and increases my complaint."

"Has your appetite been previously as good as now?"

"No, sir; it was rather poor until the last two weeks."

"What is the character of your stools?"

"They are watery."

In this case I will order the following:—

℞.—Comp. Syr. Rhei et Potas., ℥ iv.
Syr. Pruni Virg.
Tinc. Geranii Mac. *aa* ℥ ij. M.

Take two teaspoonsful, from four to six times a day, and apply a sinapism over abdomen.

Nov. 1.—Improving; tongue slightly reddened; pulse 100.

"Mr. Pope, how do you feel to-day?"

"A great deal better, sir; I can eat very hearty, and my food does not pass through me so fast as before."

"How often do you go to stool, now?"

"Not more than four or five times, sir."

"How is your rheumatism?"

"My joints still feel stiff."

Continue treatment, with the addition of—

Hydrastin, Cornin, Quinine, *aa* grs. x,

To the above prescription.

Nov. 8.—Still improving, in all respects. Continue treatment.

Nov. 23.—Discharged, cured.

Case 620.—Oct. 28. Mr. Bingham, aged 50. *Neuralgia.* I present this case, gentlemen, not for the purpose of treating the case, so much as for the interesting character of the disease, with which this gentleman is affected. He has been afflicted with neuralgia of the face for twelve years, and during this period has, at times, experienced the most excruciating pains. He has been treated by a number of physicians, and in quite a variety of ways; but, as yet, with no benefit whatever. The disease seems to depend upon a morbid irritation of the superior maxillary branch of the fifth pair of nerves, of the right side. He has had nearly all of the teeth of the upper jaw, on that side, extracted, with the hope of obtaining some relief. A section of the infra-orbital nerve was then excised by a distinguished surgeon, as a dernier resort; but these means, together with the administration and application of all the agents of the materia medica, used in similar cases, proved of no avail.

"Mr. Bingham, is this pain ever accompanied by any swelling?"

"None whatever, sir."

"At what time does the pain usually occur?"

"In the morning, generally; at night I am free from pain, unless I suddenly turn my head, which will occasion violent pain for a short time."

"About how often are you subject to these attacks?"

"Sometimes I am free from any pain whatever for a month, but usually these attacks occur in from one to three weeks."

"How long do they continue?"

"About three or four days; sometimes, when I am very busy, the pain will cease spontaneously."

Gentlemen, from what you have heard, it would seem useless to undertake the cure of this case, but I would recommend the use of the Irritating Plaster over the course of the affected nerve, as this agent has proved valuable in neuralgia, after all other means have failed.

CASE 621.—Nov. 4. PATRICK TIERNAN. *Intermittent Fever.* Has just returned from Indiana, and has been affected about nine days, with intermittent fever, of the quotidian type; tongue coated; skin yellow.

"At what time does the chill come on, Patrick?"

"Every afternoon, about three o'clock, sir."

"What is the state of your bowels?"

"They are not regular, sir."

"How is your appetite?"

"Very bad, sir."

"What is the nature of your urine?"

"Not much comes at a time, sir, and it is very dark in color."

"Have you taken any medicine?"

"Yes, sir; I have been taking Quinine."

This, gentlemen, is one of those cases in which Quinine—from some idiosyncrasy of the patient, or from some other unknown cause—does not exhibit its usual action, or, rather, does not produce its usual effects. I will, therefore, prescribe the following, in this case:—

℞.—Tinc. Gelsemini, ℥ j.
Hydrastin,
Cornin,
Prunin, *aa* ʒ ss. M.

Take a half teaspoonful, every three hours.

Also,—

℞.—Comp. Podophyllin Pills, vj.

Take three to-night, and three to-morrow night.

Nov. 8.—"Well, Patrick, how do you do, to-day?"

"First rate, sir; I feel better than I have for a long time."

"When did you have a chill last?"

"I've only had one since I was here, sir."

"When did that one occur?"

"The day after I was here."

You now see, gentlemen, how valuable some of our bitter tonics are, when Quinine fails.

Continue treatment.

Nov. 15.—Discharged, cured.

PART FOURTH.

EDITORIAL.

We are indebted to W. G. **Elder**, M. D., Rock Prairie, Mo., for the following miscellany:—

"*Emperors and Surgeons; or, Napoleons and Larreys.*—The announcement of the appointment of Baron Larrey, as surgeon-in-chief of the Army of the Alps, now of Italy, has awakened an interest concerning the antecedents of this surgeon, which the paragraphs circulating in the journals do not satisfy.

The career of his father, Jean Dominique Larrey, is so well known as to require little notice. He commenced his career as surgeon on board a French national vessel in 1787, and was sent to the coast of Newfoundland. Returning to France the following year, he was appointed assistant surgeon in the army, and served his first campaign, under Marshal Huckner, on the Rhine, in 1792. From that time to the battle of Waterloo, in 1815, he was always engaged in military duties, mostly as surgeon-in-chief of the Imperial Guard. In Italy, Egypt, Syria, Germany, Russia, wherever the French arms were carried, was Larrey found. He died at Lyons, in 1842, at the age of 76, Member of the Institute, of the Royal Academy of Medicine, Commander of the Legion of Honor, Member of the Council of Health of the Army, and bearer of many other honorable titles besides, he rose to the highest social rank. His principal works are, his Memoirs of Military Surgery, Clinique Chirurgicale, and Relation Medicale des Campaignes et voyages, from 1815 to 1840. No surgeon has left so great a reputation, both scientific and popular. It was he of whom Napoleon said, "he is the most virtuous man I have known," and to whom the people of France erected a bronze statue by penny subscription.

This beautiful work of art, from the hand of David, the sculptor, stands in the court yard of the Val-de-Grace Hospital at Paris.

The present surgeon-in-chief of the army of Italy, Hyppolite Larrey, is his only son. It is no disparagement to the father to say, that he is in all respects a worthy successor. I believe he has already won many of the posts of trust and honor held by the elder Larrey. He is Surgeon in Ordinary of the Emperor, Professor of Clinical Surgery at the Val-de-Grace Hospital, Member of the Imperial Academy of Medicine, Member of the Council of Health of the Army, Surgeon-in-Chief of the Army of Italy, etc. It is said that, on leaving Paris, he donated the house in which his father was born to the town in which it was situated, and appropriated a sufficient sum to yield $250 per year, for the purpose of keeping up a school for children in it.

The association of the younger Larrey with the younger Napoleon, has something of poetic justice, not often met with in real life. May the career of both be as glorious, and more fortunate than that of their predecessors."

Extract from the Speech of Governor Wise, of Virginia, to the Medical Students at Richmond, Virginia, on the occasion of their exodus from Philadelphia.—"Here in the midst of this metropolis, is erected an institution of Virginia's own, on the very spot where God has grown the snake-root to cure the ague and fever. (Laughter and applause.) Then we have a University, a Faculty, a hospital; and will you tell me Virginia's doctors can not, at home, in Virginia, learn to cure her diseases as well as they can by spending millions in Philadelphia for learning there, how to cure disease? I was frequently sick in Philadelphia, and have had the doctors there waiting on me. On one of these occasions, I had no less a man than the illustrious Virginian, Nathan Chapman, waiting on me. Mr. Chapman was a most eloquent orator, and as eloquent in colloquy. On one occasion I got tired of his conversation, and said to him: 'Doctor, have you no patients to attend?' Says he, 'Sir,' in his nasal tone, 'I have killed almost all, and cured the rest.' (Laughter.) Said I, 'Sir, have you no lectures to write? For God's sake, let me alone!' Says he, 'Sir, I wrote my lectures forty years ago, and I only have now to furbish them up with a few new anecdotes.' (Laughter.) 'Doctor,' said I, 'will that do in this enlightened age?' 'Yes,' said he, 'it is good enough to make corn-crackers for Virginia.' (Loud laughter.) There is more philosophy in this anecdote than perhaps you may now likely give it. Those high-pretending institutions, after they get their fame up, have more pretensions about them than there is of reality in them. The institution that is young; the institution that is rising; the institution that is to make a reputation, is the one where, if you are earnest and zealous in your search after science, you will derive most benefit. The school that is unknown and unsung to fame—there is the place to get the real waters of the true Pierian spring."

Botanico-Medical Surgeons.—Dr. Joseph Applegate, who was at this College last winter, is acting surgeon to three companies from New Orleans, at Point Isabel. This is the second of our students that has been appointed surgeon for the military. (B. M. R., June 20th, 1846.)

Blood-letting Kills.—Although Sennac was so great an advocate for the use of the lancet, he displays his candor by acknowledging that the King of Spain, and others, have lost their lives by blood-letting. We have, in a former publication, expressed our opinion, that Gen. Washington fell a victim to too great a loss of blood.—DR. COMSTOCK.

"HERMITAGE, Oct. 24th, 1844. *My dear Mr. Blair:* On the 12th instant, I had a return of hemorrhage, and two days after a chill. With the lancet to correct the first, and calomel to check the second, I am greatly debilitated.—ANDREW JACKSON."

PROF. R. S. NEWTON:—"Hung be the heavens in black!" The lancet for hemorrhage, and calomel for chills!! It is impossible to express one's feelings of horror and indignation on reading Gen. Jackson's letter. *How long*, we mentally inquire, shall our nation be robbed of men who are its defense in war—its pride and glory in peace—its pillars of fame in all lands—by a system of murderous medical treatment, which the common sense of mankind should denounce as absurd, base, false, and contradictory in principles, and which universal experience proves to be worse than "war, pestilence and famine"? Washington—the morning star of our national horizon—after having escaped unhurt the rifle of the red man, the cannon of the British, all the unnumbered perils of war, and the fatigues of an incessantly active life in the field and in the cabinet, fell a victim to the lancet and calomel! Within twelve hours, he was deprived of 80 or 90 ounces of blood; afterward took two doses of calomel; then five grains of calomel, and five or six grains of emetic tartar; and was finally blistered on the throat and extremities, till he was so far reduced as to be scarcely able to articulate the wish that he might be permitted to die without interruption!!

And for what was the aged patriarch thus treated? For the Quinsy (Cynanche Tonsillaris), which an old woman, with her catnip-tea, would have cured in as many hours as it took to drain him of his life-blood.—*Thom.*, Vol. 1, p. 55.

THE SPRING CLASS.

We are glad to say, for the benefit of those who take an interest in the prosperity and success of our Institute, that the Spring class is large, numbering sixty-odd matriculants, more than half of whom will apply for graduation. It affords us much gratification to see the Institute so well patronized and sustained. All who attend a course of lectures here, are fully satisfied that the instruction is full and complete, and the graduates generally have the reputation of being thorough men. Eclecticism is rapidly gaining ground, and before many years will doubtless be the universal practice.

SHALL CINCINNATI EVER HAVE A BOARD OF HEALTH?—A TIMELY SUGGESTION TO THE NEW CITY COUNCIL.

There is an ordinance providing for the maintenance of a Board of Health in this city; but though the existence of that ordinance is a recognition of the use, and even necessity, of such a board, none is, in reality, to be found. The utility of an institution of this kind has been felt in all the large cities of Europe, both in ancient and modern times; and the various statistics which it is its province to gather and preserve, are generally found of vast importance, not only to medical science, but also to the statesman and the general legislator.

It is no slight disgrace to a city that has reached the size and populousness of Cincinnati that no periodical mortuary statistics can be obtained, whereby the influences of its various changes upon the longevity of its citizens might be ascertained. No data derived from experience are secured for the benefit of future city legislation, and we are obliged to trust to the doubtful power of observation in matters whose grave importance demands the safety attendant upon facts.

This, the most evident duty of a Board of Health, is one easily discharged, needing for its fulfillment only the exaction of a weekly report of deaths from every undertaker in the city, and from the superintendents of our jails, work-houses, infirmary and hospitals. These statistics duly published would be public thermometers of the sanitary condition of the city, and if to the number of deaths were added, as far as possible, the causes of death, and late residences of the deceased, medical men would frequently proceed more intelligibly than they now do, and Council would often legislate more wisely, because gifted with a certainty of knowledge in a variety of cases, whose bearings are not as positively felt as they would be if the comparative healthfulness of the various quarters of the city were known with accuracy.

In view of these facts, and seeing of what vast importance and use are the reports of such organizations in the large eastern cities of the United States, we urge upon our new Council the speedy appointment of a permanent and active Board of Health, bound by them to return periodical reports on the ous subjects within their province, with as much accuracy and regularity as the Board of City Improvements, or any other Board organized for special city business. Let us know the sanitary condition and mortality of our city. Do one hundred deaths occur in a week; do two, or fifty? Who can inform us whether an epidemic is raging among us, or whether we are in the midst of a healthy city? Let us have a good active Board, a Board the fruits of whose labors may be seen, for if they *are* seen, they can not but be as beneficial here as in the other large cities of the States where such disgraceful neglect has not been allowed to prevail.—*Cin. Enquirer.*

BATHING IN COLD WEATHER.

DR. MAYO G. SMITH, of Newburyport, has accustomed himself to bathe in the open, or icy, as it might be, river during the winter. In a letter to the *Herald* of that city, he says:—

"This is the fourth winter I have bathed in the river or sea since my return to the United States. I have run five miles, divested myself of clothing, dashed into the river, swam amid the ice cakes, then dressed, and ran two miles home. I have dived into the stream from the end of the pier seven or fifteen feet into the channel, whose rapid current and tidal motion ordinarily prevented freezing—or, if frozen, I have cut the ice, and at no time this or preceding winter, have I been sheltered by house or shed; but after a bath, such is the warmth, that summer clothing would suffice for covering.

"The coldest morning it was 15 deg. below zero, or 47 deg. below freezing point. I usually ran a couple of miles, used a flesh brush and towels, sometimes stand in the snow, frequently dry myself in cold north-east winds. I take no beverages, no coffee, tea or spirituous drinks, nor do I use tobacco. I never feel cold after leaving the water; never suffered from colds; never have coughs. I never had disease of any kind; no aches; no pains. My bathing time is by or before sunrise.

"Cold baths should not be used at all times. I know of but one rule for guidance. Should reaction occur after bathing, it is a safe practice—not otherwise. No man can judge for another—every one may for himself. If, immediately after the shock, plunge, or shower, a warm glow is diffused over the body, it is beneficial. A rent in one's coat, a fracture of a boot, damp feet, or a current of air, is often more dangerous, nay, deadly fatal, than the entire submersion of the body in congealing water, or exposure to freezing air. More risks are daily incurred by ladies with unprotected feet in one day, than a winter's bathing."

BOOK AND JOURNAL NOTICES.

CLINICAL LECTURES ON THE PRINCIPLES AND PRACTICE OF MEDICINE. By JOHN HUGHES BENNETT, M. D., F. R. S. E., Prof. of the Institutes of Medicine, and Senior Prof. of Clinical Medicine in the University of Edinburgh. New York: Samuel S. & William Wood. 1860.

We are indebted to the publishers for a copy of the above work, which we consider one of the very best ever offered to the medical profession. It is already in its third edition, which shows how well it is appreciated and received by physicians generally. Its emanating from such a source as Dr. Bennett, and from one whose long and extensive hospital practice has given abundant opportunities for observation, is at once a strong presumption that it is a work of great value and practical utility. And we can safely say, that the reader will not be disappointed when he comes to peruse its pages.

The author first gives us the rules to be observed in making an examination of a patient; he then goes into the principles of medicine, and dwells at length, in his clear and happy style, upon general and special pathology, illustrating his subjects with numerous wood-cuts; after which specific diseases are considered in their proper classes, their symptoms, diagnosis and pathology given, and cases of each disease reported, with comments, taken from the hospital records. As an example, we add one case, from p. 635:—

"CASE cxxxiij.—*Double Pneumonia—Treatment by Mercury, which caused profuse Salivation before admission. Prolonged Recovery.*

History.—ROBERT JUDE, aged 36, a brick-layer; admitted Dec., 1855. On the 1st inst., while engaged building bricks round a corner, the weather being very cold and windy, he suddenly felt a pain in the chest, deep-seated, half way down between the ensiform cartilage and umbilicus. The pain rapidly grew worse, and caused nausea, but he could not vomit. He immediately went home, took some gruel, and went to bed. On the 4th, a medical man gave him some pills, one of which he took every third hour. On the 6th, his teeth were loose, the gums very tender, and the tongue swollen to twice its natral size, so that he could not spit out the excessive amount of saliva that was excreted, and which consequently flowed from his mouth. He also had pain in the loins.

Symptoms on Admission.—On admission, the excessive salivation had much diminished, but there is still tenderness and redness of the gums, with considerable discharge from the mouth; the breath fetid; the tongue covered with a dense dirty white coating. The bowels, while taking the pills, were open from six to seven times a day; they are now regular. His diet has been confined to farinacious articles. On percussing the chest anteriorly, it is everywhere resonant; but posteriorly, it is dull on both sides; most so on the left side. On auscultation anteriorly, nothing abnormal; but posteriorly, respiratory murmurs are harsh and shrill, with occasional sibilation. At the base on right side, there is crepitation on inspiration; on left side, respiration is tubular. Vocal resonance equal superiorly and anteriorly, but posteriorly everywhere increased; on the left side, amounting to branchophony. Pulse 96, weak; heart sounds normal; skin hot, moderately dry, but there has been profuse perspiration; there is dull pain in lumbar regions; urine opaque from the existence of a redish cloud; sp. gr. 1024, not coagulable, but clear on the addition of heat; chlorides diminished in quantity.

℞.—Sp. Ether, Nit., ʒ iij.
Potass. Acetat. ʒ ij.
Aquæ ad., ℥ vj. M.

One table-spoonful to be taken every four hours.

℞.—Liquor. Sodæ Chlor., ℥ i.
Sp. Vini Gallic, ʒ ss.
Infus. Rosar. c. ad., ℥ vj.

M. Ft. Gargarisma.

Progress of the Case.—December 11. Crepitation more diffused over right back. On left side, respiration still dry and harsh. Chlorides absent from the urine.

Dec. 12.—Crepitation now audible over left back, Lithates in urine more abundant. Discharge of saliva still copious, but greatly diminished in amount. Pulse 80; weak.

Habeat Vini, ℥iij, per diem.

Dec. 13.—Chlorides in urine again perceptible.

Dec. 14.—Chlorides in urine abundant. Crepitation posteriorly diminishing; sputum still copious, frothy, and somewhat gelatinous. Breath continues to give off the mercurial fetor.

Dec. 15.—Last night had copious diaphoresis, followed by great relief in his breathing. Stil la few crepitations posteriorly, increased vocal resonance, more marked on left than right side. Urates very abundant in urine. From this time, he gradually improved.

On the 21st, all moist rale had disappeared, but respiratory murmurs harsh posteriorly, and vocal resonance still increased.

Dec. 26.—Still a coppery taste in mouth. Yesterday, felt hungry for first time, and was ordered to eat an egg for breakfast, and steak for dinner. From this time, he rapidly recovered, and he was dismissed January 2, 1856.

Commentary.—In this decided case of pneumonia, with absence of chlorides from urine, we had an opportunity of observing the effects of mercurial salivation on the progress of the disease. If it be contrasted with many other cases of the same kind previously recorded, it will be seen that the disease itself was in no way shortened by the exhibition of mercury. Resolution commenced on the fourteenth, but was not completed till the twenty-first day. On the other hand, the unpleasant effects produced by the mercury, the severe swelling of the tongue, soreness of the gums, and profuse salivation, must not only be regarded as so many increased evils and unnecessary symptoms superadded to the original disease, but as being the cause of prolonged convalescence. For although the leading physical signs had disappeared on the twenty-first day, he could not eat until the twenty-sixth day, in consequence of the coppery taste in his mouth. But as soon as nutrients could be taken, he recovered rapidly. No fact could better demonstrate the utter uselessness of the drug, and its occasional mischievous effects."

From the foregoing extracts, the reader will form an idea of the manner in which Dr. Bennett teaches practical medicine. The advantages are apparent, and need not be specified here.

The work under consideration possesses peculiar charms for us, because it contains such overwhelming proofs, from such high authority, of the utter fallacy of still accepting the dogma that mercury and venesection are indicated in inflammations. The controversy on "blood-letting" between the author and the late Dr. Allison, is embodied in the volume; and it may not be uninteresting to quote a few paragraphs expressive of the author's opinion in relation to the use of mercury and the lancet. On page 276 he has the following:—

"As to mercurials, the confident belief in their power of causing absorption of lymph, by operating on the blood, is not only opposed to sound theory as formerly explained, but, like blood-letting, is not supported by that experience which has been so confidently appealed to in their favor. They have been most praised in the treatment of serous inflammations, and in iritis. But recent careful observation has demonstrated that the moment these diseases are treated without mercury, they are uninfluenced (except in certain cases for the worse) by this drug. Thus, from an analysis of 40 cases of pericarditis treated with mercury and recorded with unusual care by the late Dr. John Taylor, only 4 appear even coincidentally to have been benefited in any way. And of 64 cases of iritis, of every degree of severity, including its idiopathic, traumatic, rheumatic and syphilitic varieties, treated without mercury by Dr. H. W. Williams of Boston, U. S., the results, with four exceptions, which were neglected at the commencement, were perfectly good.

I can not, therefore, resist the conclusion, that the principles which led to an antiphlogistic practice in acute inflammations were erroneous, and are no longer in harmony with the existing state of pathology. I think it has been further shown that in recent times, our success in treatment has been great, just in proportion as we have abandoned heroic remedies, and directed our attention to furthering the natural progress of the disease."

This is strong testimony against the old doctrine of curing disease, and we are happy to see that some of the intelligent and courageous of the medical profession are coming over to the principles contended for by our school for the last thirty years.

Again, on page 457, in commenting on a case of jaundice arising from obstruction of the bile-duct and terminating fatally, in which mercury had been used, Dr. Bennett uses the following language:—

"The benefit of mercury in such cases, though strongly recommended as a means of altering the constitution of the bile, appears to me very doubtful; for, supposing it to possess the effect ascribed to it, and to act as an alterative and cholagogue, its action in obstruction of the gall-ducts must be to distend them still further, and thus increase the pressure on the hepatic cells, and consequently the disintegration of the hepatic texture...... At the time, I expressed my want of confidence in its virtues, an opinion which the progress of the case fully justified. In the present state of science and art of medicine, there is no one point in therapeutics which so urgently requires thorough re-investigation, as the real value of the medical properties attributed to mercury."

It is our opinion, that in no disease is mercury less indicated than in jaundice, which is simply an evidence that the bile is secreted, but can not escape on account of some obstruction in, or constriction of, the hepatic ducts. Bile is a mixture of various ingredients, some of which pre-exist in the blood and pass into the excretory ducts by simple exudation or strainage, while others are not found in the circulation, but are elaborated by the hepatic cells. Biliverdin, the coloring material, originates in the latter method, and, when unable to escape, is absorbed by the blood vessels and conveyed to all parts of the system. Its presence, therefore, in the circulation clearly indicates that the hepatic cells are active, and that the difficulty lies in the ducts. Mercury, with its much vaunted powers, must, under these circumstances, do further injury. If it be true, that it increases the biliary secretion, a larger amount of biliverdin must necessarily be formed, and the blood becomes more highly charged with a substance which is, in itself, directly poisonous, while the condition of its appearance in the first place, is not at all relieved by the remedy. The candid and impartial thinker will see the force of the reasoning. Dr. Bennett has seen it, and we trust the scales will eventually drop from the eyes of his brethren, that they may see likewise. We might add numerous extracts, to show the author's views concerning the use of mercury, but our space does not permit us. Enough has been said.

Dr. Bennett also proves that the old treatment of pneumonia by bleeding and mercury, is based upon a false pathology, and is attended with frightful mortality, when practiced. Let him speak for himself:—

"The treatment I have pursued in pneumonia is founded on the pathological principles formerly given, viz: never to attempt cutting the disease short, or to weaken the pulse or the vital powers, but, on the contrary, to further the necessary changes which the exudation must undergo, in order to be fully excreted from the economy. To this end, during the period of febrile excitement, I content myself with giving salines in small doses, with a view of diminishing the viscosity of the blood. As soon as the pulse becomes soft, I order good beef tea and nutrients; and, if there be weakness, from 4 to 8 ounces of wine daily. As the period of crises approaches, I give a diuretic, generally consisting of half a drachm of nitric ether, sometimes combined with ten minims of colchicum wine, three times daily, to favor the excretion of urates. But if crises occurs by sweat or stool, I take care not to check it in any way."

According to the author, the mortality under the former rigorous antiphlogistic treatment was 1 in 3 cases, while the fatality under the mode taught and practiced by him for the past eight years, has been reduced to 1 in 26. We are astonished that men with such facts before them, can still resort to the old practice of giving calomel and antimony in such excess. They have, at last, seen the folly of blood-letting, and generally abandoned it.

We have occupied more space than usual in quotations from this book, because we consider it one of the greatest triumphs of the age—the triumph of a bold and fearless denunciation of the dogmas of old school practice, the triumph of a mind, which dares to throw the lancet and calomel "to the dogs," and demonstrate by argument, by observation, and by practice, that disease can be cured without them. We hail it as the harbinger of a complete revolution in the practice of medicine, and the ultimate adoption of the principles for which our school has been contending for years. If any one thinks that we have misrepresented the author's views, let him obtain the work and examine for himself. It should be in the hands of every physician in America, and should be studied carefully.

The publishers have spared no pains in getting up the book in a handsome and substantial style, with clear type and fine paper. It contains nearly a thousand pages of closely printed matter. Price $5.50.

A PRACTICAL TREATISE ON DISEASES OF WOMEN. By J. M. SCUDDER, M. D., Professor of Obstetrics, etc. Cincinnati: Moore, Wilstach, Keys & Co. 1859.

The author of this admirable work on "Diseases of Women" has presented us with a copy of the second edition. Every one who has seen the book is fully satisfied that it is eminently practical and useful, and the fact that the first edition is already exhausted, is a full endorsement of its merit and of its appreciation by medical men.

The publishers have spared no pains in getting out a neat and substantial book, and we feel confident that it will, as it should, find a ready sale. We like to see important and useful matter widely disseminated, and no physician should be without "Scudder on Diseases of Women." Every man is seriously opposing his own interest by permitting a dislike to spend a few dollars, to be a barrier to the knowledge of woman's diseases and their cure. We say, get Scudder's Book, and you will never regret it.

EDITORIAL ABSTRACTS AND CLIPPINGS.

To Excite Premature Labor.—Dr. Baum objects to many methods the danger of too easily rupturing the membranes. He employs cat-gut bougies of a foot long and two or three lines thick; he steeps the end in soft water to full softening, and passes it, well oiled, into the uterus, by means of twisting motions, until a length of only one or two fingers' breadth remains in the vagina. Uterine contractions are set up in from six to twenty hours. The bougie never (?) injures the membranes; it may be removed shortly before the rupture of the membranes or the birth of the child. During 1857 or 1858 the author had twelve opportunities of employing this uterine catheterization. By its means eleven children were born alive, five dead; eight mothers recovered, and no one sank from any puerperal process. The modes of death were—one from pneumonia, one from miliary tuberculosis, and two from Bright's disease. In estimating the risk of rupturing the membranes by this method, it is right to bear in mind the author's precautions in using very flexible cat-gut bougies, and softening them for use.—*Monatschr. fur Geburtsk.*—*N. C. Med Jour.*

Varicose Veins.—Before the King's County Medical Society, as reported and published in the November number of the New York Journal of Medicine, Dr. Enos reported a case of varicose veins successfully treated by injecting *persulphate of iron.* He is of opinion that this is the first time persulphate of iron has been used for this operation, and he thinks it will prove a better preparation, because of its less irritation than the perchloride.

Veratrum Viride in Chorea.—Dr. Baker, of Eufaula, Alabama, reports four cases of Chorea, treated by himself and Dr. Terry, with Veratrum, and cured by it, after all other remedies had failed. As soon as the patient comes under its influence, all twitchings, jerkings, and distortions gradually cease, and if continued, a radical cure will be effected.

The Physicians and Surgeons of Guy's Hospital have awarded the Ashley Cooper Prize, of $1500, to Dr. CRISP, of London, for his Essay on "The Structure and Use of the Thyroid Gland."

Professor AGASSIZ has returned from Europe with renewed health, and important materials for his Museum of Natural History.

M. CHASSAIGNAC recently punctured a carotid aneurism, mistaking it for an abscess, and was then compelled to ligate the common carotid, which he did with success. The patient has recovered, with no bad symptoms.

MR. S. T. TROWBRIDGE, of Decatur, Ill., has invented a physician's cane. It consists of a hollow tube, closed at its bottom, and having a semi-tube attached to the knob or handle, and fitted with the cane, and allowed to move freely in and out of it, and forming a receptacle for vials containing medicines.

Treatment of Scarlatinous Angina by Iodine.—

℞.—Iodide of Potassium, 1 gr.
Iodine, 1 gr.
Chlorate of Potassa, 4 grs.
Nitrate of " 4 "
Aqueous solution of Potash, 4 grs.
Water, 240 grs.

Administer one or two teaspoonsful every four hours, according to the age of the patient.—*Gazette Medicale de Lyon.*

Chlorate of Soda.—Chlorate of soda is considerably more soluble than the corresponding potash salt; it may consequently be given in a much smaller quantity of vehicle, and moreover the taste is less disagreeable. It has been employed with uniform success in several cases of diphtheria.

Gonorrhea.—In the Oglethorpe Medical and Surgical Journal, for November, Dr. M. D. Mooney, of Georgia, reports his experience in the treatment of gonorrhea with the extract of the Indian Cannabis. He says: "I used the following prescription in four cases of gonorrhea, and was successful in every case, in from five to seven days:—

℞.—Sugar of Milk, ʒ s.
Ext. Indian Cannabis, 20 grs.

Mix well together and divide into 60 powders, one to be taken every three or four hours. This prescription, I am persuaded, will relieve the most obstinate cases in a short time."

Chloride of Zinc.—In the London Lancet, G. W. Spence recommends the following formula for a chloride of zinc plaster:—

Dissolve fifty grains of prepared chalk in two drachms (by measure) of commercial muriatic acid; dissolve one hundred and fifty grains of sulphate of zinc in two fluid drachms of boiling water.

When required for use, the two solutions are to be mixed, and they will produce a paste weighing nearly an ounce, and containing about a sixth of pure chloride of zinc.

Strabismus.—Du Bois Reymond (Muller's Arch.) recommends the *stereoscope* for the cure of squinting. The principle is the same as in the case of prismatic spectacles advised by Mr. Wells.

The French nation has just erected a statue to Jenner, in front of the Louvre.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

Article I—*Cancer of the Womb.* By W. G. Bruce, M. D.

Scirrhus, or Cancer of the Uterus, may be defined, an affection which changes the tissue of that organ, and at the same time has a tendency to extend to adjacent parts; and finally to annihilate itself by ulceration, which commences at the point where the disease first manifested itself. Some writers make many divisions and subdivisions of these ulcerations, but I am convinced that they are all but different phases of the same disease.

Authors recognize many varieties of cancerous disease, viz:—

1. *Fungus Cancer, or Cauliflower Excrescence*, that variety which is characterized by great swelling; is mushroom-like, and extends over the entire surface of the cervix uteri; appears granular or lobe-like; is either hard and firm, or soft and pulpy; color, between a blue and a brown; secretes a fluid which has the color of menstrual blood; is sometimes thin, at others, thick and ropy. In some cases, there is a continual discharge of bloody pus, of a dark color; terminates in carcinomatous ulceration.

2. *Bloody Cancer*, an engorged condition of the uterus, of a dark or bluish color; usually attacks the cervix, sometimes affecting no other part; there is great softness of the uterine tissue, especially at the os; on compression of the tumor a crepitating sound is obtained; continuous discharge of dark coagulated blood; incessant flow of a creamy fluid, which afterward becomes impregnated with fetid substances.

3. *Scirrhus, or "Stone Cancer,"* that form which consists of induration and swelling, either of a part or the whole of the

womb, with an alteration of tissue which can not be brought back to its normal standard, and which must inevitably spread and ulcerate, unless the affection of the tissue is eradicated. This form of cancer may take its origin in the vagina, and spread irregularly over, and indurate the whole of that organ, and finally attack the cervix uteri, and become an ulcerated cancer.

4. *Medullary, or Encephaloid Cancer*, is characterized by the medullary substance of which the tumor is composed; by offensive discharges and separation of flesh in a state of dissolution; surface of the ulcer irregular; the disorganization of the invaded structure is, in some cases, confined within the limits of the ulcer; upon pressing the tumor, a pale yellow fluid of a creamy consistence will ooze out.

5. *Open, or Ulcerated Cancer*, may arise from either of the above mentioned forms of the disease, assuming a malignant character. When this form of cancer is a primary ulcer, as is sometimes the case, it usually takes its origin somewhere on the cervix, resembling the "superficial ulcer" of some authors. These ulcers are not elevated above the surface to any considerable extent, but they are very much indurated; surface very irregular, and seems to be composed of granular matter.

The so called *Lardaceous Cancer* is only scirrhous cancer modified, by becoming soft and ulcerated; indeed, I am of the opinion, notwithstanding all the nice divisions and subdivisions by authors, that all cancerous diseases are but slight modifications of the same.

Symptoms.—It is not an uncommon occurrence for the first symptoms of cancerous disease to be entirely overlooked by both physician and patient, till the disease has far advanced. The first signs of this disease are, usually, derangement of the menstrual functions; the menses come earlier, the flow is temporarily profuse; leucorrhea, either continually or for a limited period, sometimes white, at others yellowish, and not unfrequently of the color of the menstrual fluid, especially after local excitement, such as coition, the introduction of the finger, the speculum, or anything else that is liable to irritate the parts; bearing down sensation in the hypogastrium; sensation of pressure in the rectum or urinary organs; defecation and micturition, attended with more or less pain; uncomfortable feeling during coition; piercing pains during the menstrual period; painful bearing down in the loins, of short duration; alternate distention and contraction of the abdomen; hemorrhoids; hysteria, etc. In some cases, we may perceive, even at this time, some induration and enlargement of the uterus, in the region of the cervix, frequently that portion of the organ presenting an uneven appearance. For a great while, the symptoms may remain the same; but no sooner has the cancer manifested itself, than the cervix, the whole body of the uterus, and the os tincæ are enlarged, indurated, lobular, surface smooth, of a reddish color, and not ulcerated; or, the surface may be spread over with mucus mixed with blood, or blood alone. In some cases, there is an enlarged condition of the ovaries; upon an examination per rectum, in some cases, we find but one tumor, but in the generality of instances there are several tumors; even when the entire body of the womb is attacked, there may be found existing upon the surface several elevations. If the physician is not expert in detecting the other symptoms of cancer, he is apt to mistake these elevations for fibrous tumors. When the tumor becomes an open ulcer, (if it is cancerous), the pains which previously had been of but little consequence to the patient, become continual and most excruciating; patient experiences a feeling as though there were many knives cutting the parts in all directions; hemorrhage is now quite frequent; in same cases, continual bleeding; an offensive leucorrhea now manifests itself, which becomes more offensive as the ulceration progresses, and which is sometimes mixed with dark coagulated blood; hemorrhage accompanying the menses at this stage of the disease, if they have not already ceased. In cases where the menses have ceased, there are symptoms indicating a reappearance of them; in some cases, a continual watery discharge is present, which is either entirely devoid of smell, or has a nauseating odor, and stiffens the linen, leaving yellowish or greyish stains upon drying; during menstruation, this discharge becomes of a pink color, and is an indication that ulceration exists, or is about to take place; the pain now endured by the patient is most excruciating; nates, iliac region, hypogastrium, loins and thighs become the chief points of the most lancinating pain; also, severe cutting pains are experienced through the cervix; but notwithstanding the inordinate severity of these pains, in the majority of cases the sufferer is perfectly rational, even up to the moment of her final dissolution. The most remarkable fact observed in these cases is, that the cancer, in many cases, does not prohibit conception. Notwithstanding the uterine havoc produced by the cancerous disease, the constitution remains unimpaired. Uterine cancer seems to affect the general system less than any of the other varieties; as long as the ulcer is confined to one spot, the constitution and the appetite of the patient are not interfered with. Instances are on record where the patients apparently retained their health and vigor after the cancer had progressed to a considerable degree. We have on record other instances, however, in which the patients began to decline from the first manifestation of the disease; had no appetite, became sad, indulged in the most melancholy reflections; pain in every part of the body; transient swellings, which took place very suddenly; patient very uneasy, continually changing her position.

Febrile symptoms are not usually present until the cancer has advanced to its last stage, when a hectic fever sets in, with one or more exacerbations daily.

The third stage of cancerous disease is the most distressing to the patient, being attended by the general breaking up of her constitution. The powers of digestion are in a measure destroyed; the processes of nutrition are retarded; the skin loses its healthy appearance, becomes of a pale yellow or dark color; in some cases, violet-colored streaks form over the face; a general wasting away of the entire organism sets in; the tissues become thin and flabby; there is an absence of tone in the muscles; the flesh loses its original firmness; the bowels are constipated; the excretions hard, and of a dark brown color; appetite almost completely destroyed; the pains in the diseased organ are of such an excruciating character that the patient can get no rest, not even a little sleep, and she sinks gradually until, finally, death comes like an angel of mercy and releases her from further suffering.

Cause and Termination.—The *cause* of cancer of the womb is not yet well understood. Some authors assert, that physical or vital derangements of that organ may be implicated as causes of the disease; but in *nine cases out of every ten*, these causes may exist without bringing on cancerous diseases, and, on the other hand, cancer may manifest itself without the physician being able to detect *any* cause for it. If a person is of a cancerous diathesis, these causes may be instrumental in developing the cancerous disease; but the predisposition to cancer must exist before any carcinomatous affection can be developed, and such predisposition can not be ushered into existence by any or all of the above alleged causes. I am inclined to the opinion that the only cause of carcinoma is a *pre-existing cancerous germ*, which may subsequently become a distinct disease, ushered in by any and all causes which have a tendency to arouse the uterus to inordinate action.

Cancer may occur at any period in life, from the age of sixteen to periods of the greatest longevity. According to the writings of most authors, it occurs most *frequently* between the ages of forty and fifty; less frequently between thirty and forty; least frequently before twenty-five and after seventy. Cancer manifests itself most frequently, and with greatest celerity at the critical age; but this is far from being the original cause. Authors have enumerated syphilis, menstrual derangements, repeated uterine hemorrhages, miscarriages, masturbation, abuse of the sexual passions, as exciting causes of cancer of the womb.

Cancer of the uterus runs an indefinite course; its continuance, on the other hand, is in the ratio to its severity. I think, as a general thing, the average duration of the disease, is from fifteen to twenty-two months; however, the disease may terminate fatally in four or five months, or in as many years. Persons affected with this disease, have been known to retain all their bodily strength up to the moment of dissolution; others there have been, who die, not of the cancerous disease, but of convulsions, hemorrhage, slow fever, or peritonitis. Where the disease is allowed to run its course without the interference of remedies, it grows worse with greater rapidity than where well chosen remedies have been applied, showing very conclusively, to my mind, that the day is not very far distant when science and experience shall have the entire mastery of this disease.

When the disease is permitted to run its course, the patient loses her appetite sooner; there will be vomiting of bile mixed with mucus; borborygma; colic; constipation; flatulence; nauseating and bitter eructations; thrush sets in; patient grows very poor; feet and legs become edematous; whole body even, in some cases, becomes infiltrated, more or less; patient loses strength, looks emaciated; ulceration becomes more rapid every day, when, very soon, death closes the scene. These are symptoms over which medicinal agents have an amazing influence.

If the disease is confined only to a part of the womb, the adjacent organs, upon post mortem examination, are usually found in a normal condition; but where the whole of the organ is attacked, and is ulcerated at various points, the ovaries, peritoneum, vagina, bladder, and adjacent parts may become involved in the cancerous ulceration; in more remote organs, as little alteration is found as in subjects where death took place from other malignant diseases of the viscera.

Diagnosis.—When the reader shall have looked over the history of the symptoms of cancer, as I have given them above, it may appear to him a very easy matter to detect that disease; but both student and physician should ever bear in mind that there is no one disease that has been so often supposed to exist where there was no such condition present, or so often overlooked, where cancer did really exist. A simple inflammatory condition of the uterus may be mistaken for cancer of that organ, corroding leucorrhea, simple or malignant ulceration of the womb, and many other uterine derangements equally as far from being cancerous, unless the physician is very careful to make up his diagnosis upon the whole of the diseased phenomena.

We may find the size of the womb greatly augmented throughout its entire body, or the cervix only; sharp, cutting pains; disagreeable feeling at the bottom of the vagina; pains in the small of the back; bearing down sensation in the loins, and hypogastrium; but if pain is experienced only where the uterus is compressed, and the inflammatory and enlarged condition of that organ is not indurated, the cervix still being smooth and regular upon its surface, or being but slightly indurated, the physician is not to infer that he has a case of carcinoma uteri; for it is just as likely to prove chronic inflammation of the womb.

Corroding ulceration of the womb may be mistaken for cancer of that organ, if the physician is not very observing and careful when making up his diagnosis, to distinguish the difference between the first symptoms; the difference between the pus secreted in the two diseases; between the course they run in their formation and development; and, above all, he is to ascertain whether or not, *scirrhus* is present.

Fibrous growths in the womb may give rise to an abnormal enlargement of that organ, causing it to become quite hard, and thus lead us to suppose it to be a scirrhous condition; but upon a careful and close examination, we shall discover our mistake. No matter how hard these tumors may appear, which are of an indolent character, they extend down from the cervix, frequently protruding through the os tincæ, where they may be easily detected by means of that best of probes, the *finger*. As little difficulty as there is in diagnosing polypi, they may be mistaken for cancerous conditions of the uterus, especially when they are caused by an impoverished condition of the uterine tissue, or when they occur within the cavity of the womb; for in the latter case, they are the cause of hemorrhage, malignant discharges, and ulceration of the os uteri, having very much the appearance of that resulting from cancerous disease; but the entire absence of induration, the smoothness and softness of the os, its partial dilitation, should be grounds of sufficient definiteness to make a correct diagnosis upon, even before the polypus can be felt with the finger. Menstruation may be most profuse; there may be present a most copious and corroding leucorrhea, and yet not a single vestige of cancer.

In simple ulcerations, there may be sharp, stinging, cutting pains in the cervix and vagina, copious menstruation, irregularity of the surface of the os uteri, abnormal discharges, and many other characteristics indicative of cancer, and yet we are not to mistake the disease for *cancer*, as long as there is an absence of the fetid and ichorous discharges, ever present in the advanced stages of scirrhus and cancer of the womb. But the physician is not to rely upon the character of the discharges alone, however malignant they may appear; if those diagnostic signs are not present which are recognizable by the *touch*, he is not to be too sure that he has a case of cancer.

Prognosis.—The prognosis of cancer of the womb, when the disease is once confirmed, has, I think, *always* proved unfavorable, under any system of treatment; the longer it has existed, and the greater the diffusion of the cancerous ulceration over the uterine surface, the more difficult is the treatment. The scirrhous, or indurated variety, is the most obstinate in its resistance to remedial agents, while the medullary variety, being a milder form of the disease, is less obstinate, and in the majority of instances may yield to a proper course of treatment. Many cases of confirmed cancer of the uterus have been reported as "cured," but I am of the opinion that such reports have been the result either of errors in diagnosis or the criminality of pretension. Speaking in regard to the curableness of carcinoma uteri, a French author says:—"It seems to us that a cure may be possible, although it must always be extremely difficult." Why "extremely difficult"? Certainly for no other reason than that it is "extremely difficult" to know *what to do.* I maintain to-day, that we are yet ignorant of any agent, or class of agents, possessing the power to eradicate confirmed malignant scirrhous carcinoma uteri.

Treatment.—The first thing to be attempted in the treatment of this formidable disease is, to endeavor to bring about a *change in the character of it.* If we succeed in doing this, the cancerous disease can be eradicated. The best agents known to the profession for effecting this purpose, are to be found among those classes known as *Escharotics* and *Eutrophics;* the former to be applied locally, the latter to be given internally.

As an escharotic, I think the paste used by M. Landolfi forms one of the very best with which I am acquainted. It may be prepared after the following formula:—

Zinci Chlorid., ʒ ij.
Brominum Chlorid., ʒ iij.
Antimonii Chlorid., ʒ j.
Auri Chlorid., ʒ j.
Glycyrrhiza Glabra Pulv., q. s.

Before the application of this or any other escharotic preparation to a cancerous ulcer, as well as during the application, the patient should take, internally, Stillingiæ Comp. Syr., in conjunction with Bromide of Potassium. The use of this article should be persevered in for several months after the cancerous tumor has been extirpated, and the ulcer entirely healed. This article may be given as follows:—To one pint of the Compound Syrup of Stillingiæ, add Bromide of Potassium half ounce; of this, give a half tablespoonful three times a day.

After the cancer has been sufficiently cauterized, the application of the escharotics should be discontinued, to permit the ulcerated surface to heal. To promote the healing process, an infusion of the root of Hydrastis Canadensis, in combination with Sanguinaria Canadensis, should be used as a vaginal wash, injected three times daily. In case of hemorrhage, the Tincture of Chloride of Iron should be exhibited.

It is not unfrequently necessary to use the ligature for the removal of cancerous excrescences within the womb, and around the cervix. When these excrescences are thus removed, hemorrhage is apt to take place; hence, it is highly necessary that some very strong astringent should be kept in constant proximity with the surface from which the growth has been taken.

If the discharges are copious and fetid, much benefit may be derived from frequent injections of Pyroligneous Acid, Chloride of Lime, Creosote, or Chloride of Soda.

Art. II.—*Trismus Nascentium Cured.* By I. J. M. Goss, M. D., of Georgia.

The reports that I have read of the above disease have been so universally fatal, that I will report a case that occurred in my own practice, a short time ago. I was very suddenly summoned to visit a child, that was supposed to be laboring under infantile convulsions. On my arrival, I found it a case of infant tetanus, originating from a want of proper treatment of the umbilicus, as I supposed. The symptoms were as follows: The child seemed very sick, vomiting at times; limbs firmly contracting; then, occasionally, the spinal column and neck were drawn to one side; the features greatly distorted; eyes protruding; pupils contracted; respiration stertorous; pulse quick and corded; bowels constipated and tympanitic. I very readily recognized this as a case of trismus nascentium, and from the reports of all the cases that I had read of, in the journals and regular works on diseases of infants, I apprehended a fatal termination. I determined, however, to make an effort to save the child if possible; but what course to adopt for the best, I could not easily decide at once. I finally concluded to try Lobelia, Gelseminum, and Æther, Accordingly I made me a mixture of 1 part Tinct. of Gels., 2 parts Tinct. of Lobelia Comp., 1 part Sulph. Æther; of this mixture I gave ten drops every hour, until the child became relaxed, then lessened the dose to five drops, and at the same time I gave Dioscorine and Podophyllin, 1 grain of the former and ½ grain of the latter, until the bowels were freely moved. The purgative acted several times, carrying off a large quantity of bile, and the child seemed much better; but after some hours, all the symptoms returned, and even more aggravated. I now increased my anti-spasmodic mixture, adding a small quantity of morphia to the first two doses. The tetanic contraction again gave way; the child, as before, now seemed very much relieved, manifesting consciousness, nursed heartily, looked about, &c. I still continued the medicines, but in some smaller dose, seven or eight drops, so as to keep up relaxation, at the same time having the umbilicus properly dressed and attended to, and the child continued easy, until I concluded the medicine might now be, by degrees, discontinued; but so soon as I ceased to give it in sufficient doses to relax the system, the contraction of the whole muscular system would return; so I had the medicine continued for several days, until the child seemed well, and even then continued it in small doses, for fear the tetanus should return. The child convalesced rapidly, until it was entirely restored to health, and is now a very thriving, fine boy; has passed through the first and second dentitions safely.

I have reported this case because the remedies were successful, and I do not remember to have seen them recommended by any author, in this almost universally fatal disease. I was led to the use of the remedies, not from any reported trials, but from my experience of them in other spasmodic affections. The Lobelia, I knew to be a potent anti-spasmodic, and so of the Gelseminum; the Æther I gave as a stimulant and anti-spasmodic; for, I am fully of opinion, that this, like traumatic tetanus, is the result of reflected irritation, from the desicated surface of the cord to the cerebro spinal centers, producing that peculiar morbid condition in those infants that have a constitutional tendency, or rather a liability to tetanus. The Gelseminum has a specific tendency to control irritation of the cerebro spinal system, as very remarkably displayed in controling paroxysmal fevers. It was its superior control over intermittent and remittent fevers, (which I regard as cerebro spinal diseases,) that led me to conclude that it would be an appropriate remedy in this morbid condition of the cerebro spinal system. I acted upon that conclusion, and succeeded, and I mainly attribute my success to the Gelseminum. The other remedies, no doubt, had a share in counteracting the rigid condition of the muscular system, but I do not think they would have removed that morbidly irritated condition of the cerebro spinal centers, which was the direct cause of the disease.

From the trials that I have made of the Gelseminum, in not only periodic fevers, but periodic neuralgia, I think that it is one of our most reliable remedies in all the morbid affections originating from irritation, direct or indirect, of that portion of the nervous system. I have used it in periodic dysentery with the happiest success; so of periodic pneumonia. Would it not be of essential service in all that genus of morbid affections having their origin in an irritability of the cerebro spinal centers? I am under the impression that it would. In tetanus, I think, from the trial above given, that it is one of our most potent remedies, and I have thus reported it that others may try it, and I hope they will report the result of their trials, as an isolated instance of success with a remedy, is not sufficient to establish its applicability in all cases of the same disease; but the very prompt action in this case, leads me to conclude that it will be found a good remedy, &c.

Mulberry P. O., Jackson Co., Ga., April 6th, 1860.

Art. III.—*Fistula in Ano.* By O. E. Newton, M. D.

The pathology of this disease, all the medical readers of this Journal, I suppose, to be quite familiar with; therefore I only intend to hint at the treatment which I have, of late, used in such cases. If it be of that division recognized as blind Fistula, I have commenced by using the dilating treatment, which consists in crowding into the sinus, or opening, a large quantity of dry raw cotton. This produces, each day, more or less suppuration, and should be repeated daily. The walls of the sinus, by this course, will be more dilated, and by pressure will begin to soften down. After using the cotton in this way for several days, I then fill the cavity with powdered sulphate of zinc, or mild vegetable caustic. By these means, I effectually break up the indurated surface of the fistulous tube, and it begins to heal from the bottom. The healing process I encourage by the use of Mayer's Ointment, or the mild zinc ointment.

If it be of the complete form of Fistula, (when the sinus communicates with the lower bowel,) after I have broken up the callous surface, I then introduce a ligature, which is very easily done, thus: I take a silver probe charged with two thread strands of saddler's silk, made smooth with beeswax, and introducing the index finger of my left hand into the rectum far enough up to meet the head of the probe, I then with my right hand introduce the probe, with the head directed to the probable communication with the bowel; bearing the index finger of the left hand closely to the head of the probe, so that when the probe reaches the opening of the sinus the point of the finger will bend the head upon the wall of the sinus. This will direct the probe downward; in the mean time I bear upon the probe with the right hand when it is drawn through, the probe being relieved of the thread. I make use of the common knot, drawn as tight as can be borne. I then make the next a double loop knot, separating the ends of the ligature; place one under a small piece of adhesive plaster, on one hip, and secure the other end similarly upon the other hip. The next day, when I want to tighten the ligature again, I simply loosen the double knot and draw the first one more tightly, and add the second, or double knot, as before; doing this each day until the wall between the sinus and bowels is thoroughly cut through, I having destroyed the callous surfaces of the pipe. I have now only a single ulcer, which I heal with the ordinary means for such purposes, which are generally very successful until the case seems nearly well, when there will often be some trouble, the edges refusing to heal. These often become fungous or angry, slight ulceration sets in, which is disposed to increase or spread. To destroy those angry spots, I apply generally a very small amount of chloride of zinc in the form of paste, prepared by finely pulverizing the chloride of zinc moistened with a few drops of water, and adding to this a little pulverized Hydrastis Canadensis, spread just large enough to cover the little spot. Let it remain on a few hours, then apply a poultice of powdered slippery elm; change twice per day, when in a couple of days, the part covered by the zinc sloughs, and the spot soon will become perfectly healthy and heal. While this spot is healing, I dress it with the mild zinc or Mayer's Ointment, and over this I place small strips of adhesive plaster to support the part, which is highly necessary, as there seems often such a relaxed state of the integument as to prevent it from healing. This support by the adhesive plaster assists very much to successfully close a Fistula in Ano, in the last stage. If there be several tubes, I treat each one in the same way.

I would inform each reader, however, who has never been called upon to treat a Fistula, not to flatter himself with the idea that it is a very easy matter to successfully treat such a case, for such an opinion will not be realized. He will have to faithfully attend the case, and will often exhaust his own patience as well as that of his patron; and if the reader wants to know of me what time he should be expected to take in curing such cases, I would answer, some cases he may cure in two months, others in four and six; and the very worst cases may require a year, and even then he may have reason to congratulate himself on a favorable termination. The Eclectic practice is the only practice that successfully treats this disease, except a *very* rare instance to the contrary.

Art. IV.—*Lead Poisoning.* By John Buchanan, M. D., Philadelphia.

The study of the influence of the various elementary bodies, to wit, the metals and their compounds upon the animal economy, is one of vast, of momentous interest. All are aware of the terrible effects of mercury on the human system; all know the deleterious effects of phosphorus inhaled; but all do not seem so forcibly impressed with the pernicious effects of lead, unconsciously absorbed into the system.

Colica Pictonum* is a disease of historical interest, known wherever lead is mined, manufactured or used; a disease more prevalent in Philadelphia than in any other city of this country, owing, undoubtedly, to its colossal white lead manufactories, its varied and numerous paint factories, its magnificent oil cloth establishments, where lead is almost exclusively used. As met with in practice, it is an affection common to painters and employees of those establishments; indeed, to all who have to do with any of the various preparations of lead. Of all the preparations of lead, the carbonate is the most prolific of disease, because it seems more easily absorbed into the system and is in more general use, as it enters into the composition of ordinary white paint. The largest number of cases which present themselves, have well defined, strikingly characteristic symptoms of lead poisoning, which is readily traceable to that substance, either by contact with the skin, by inhalation of the vapor of paint, by drinking of fluids contaminated with the salts of lead, or by the use of agents adulterated with it.

Symptoms.—The chief characteristics of lead poisoning are, severe colic, obstinate constipation; these are the primary symptoms, but in repeated attacks there is pain in the head and limbs, simulating rheumatism, cramps, etc., some cases epilepsy, coma. Beside the usual colic and constipation, there is also sometimes paralysis of both hands and wrists; sometimes of one only, as in wrist-drop—the extensors of the hands and fingers become palsied, and thus permit the hand to drop down utterly powerless. But these symptoms, *per se*, are not solely to be relied on. The most reliable diagnostic characteristic is the usual blue line, discernible on the margins of the gums, which is a true sulphuret of lead, formed by the contact of the decomposing matter around the teeth, charged with sulphureted hydrogen, with the lead in the gums, probably an oxide. "That it is a true sulphuret is proved by the influence of sulphur baths upon patients thus affected, for a large part of the cutaneous surface becomes quite black from the union of the sulphur with the lead." The blue line along the gums, under the same influence, becomes almost black; this appearance is also seen on the face. The breath has a most peculiar odor. The blue line on the gums can be produced by the administration of the acetate of lead; it remains distinct after death; and this peculiar appearance of the gums, this truly reliable diagnostic sign, teaches us that the poison is pervading the system; it warns operatives in lead that the poison has entered, and that they may look out for its baneful consequences; it is the best sign in diagnosis, in aiding us in discriminating between colic so arising, and colic from other causes.

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* So called from the inhabitants of Poicton, who suffered most extensively from drinking wine which was largely impregnated with lead in order to prevent it becoming sour.

Indications of Treatment.—To get the bowels into an active state; to eliminate the poison from the system; to allay pain, and to provide prophylactics, etc., etc.

In the treatment of this peculiar malady, relieving the bowels of their spasmodic action seems to be the most pressing indication. I have found the lobelin of great service, given in oft-repeated doses; it produces relaxation of the bowels, and gives prompt relief of the most urgent symptoms. Lobelia enemas are of essential service; packs, fomentations, friction, etc., may also be found advantageous. Habitual costiveness, to which all lead-workers are liable, is best relieved by attention to diet, fruits, and some vegetable tonic. Hyoscyamus deadens the sensibility, without increasing the constipation. In paralysis, resulting from lead poisoning, such as wrist-drop, electricity will give the requisite stimulus, to restore the damaged muscles—one pole of the battery to the origin, the other to the insertion of the muscle to be acted on. The mechanical support of a splint affords great comfort, and accelerates recovery; so with friction. Small doses of strychnine are very useful. I usually administer it in $\frac{1}{12}$ of a grain doses, in the form of bread pills. It is the most potent remedy we possess for the removal of lead paralysis; it seems, as it were, to keep the diseased muscles excited and alive, and prevents the dormant state, which favors the production of atrophy. The tendency of the palsied muscles is that of atrophy, and *they* undoubtedly, through some peculiar effects of the poison, undergo important organic changes which never permits of complete normal restoration, although good health and power may be required, by obviating the causes that produced it and eliminating the poison from the system. The lead cachexy often lays the foundation of serious cerebral mischief.

Iodine, in some of its preparations, seems to exert a specific effect upon the poison; indeed, the best cure is effected by the expulsion of the poison from the system, and the principle of treatment by some preparation of iodine—to wit, the iodide of potassium—is to render soluble any metallic compounds, which have become fixed in the living body, and to facilitate their elimination by uniting them with a substance most readily cast out of the system. Its *modus operandi* is simple. This agent is absorbed into the blood, combines with the poison, forms a new salt, frees and separates the poison from the injured part, the damaged fiber, and once more sets it afloat in the circulation, and causes the elimination of the lead. In order to obtain the full benefits of this agent, the bowels should be daily moved with small doses of podophyllin, leptandrin, etc.

Another very successful method of eradicating (after the urgent symptoms have been relieved) the poison from the system, is by baths. By some this is esteemed the best, nay, the indispensable means of cure; a tepid ley bath, with the use of galvanism in the bath. Sulphur baths are most essential; will produce a feeling of general heat, induce copious perspiration, cutaneous eruptions, and favors elimination by the affinity it has for the poison.

A most effective bath, as an eliminative agent, may be thus made:—Thirty gallons water, with four ounces of the sulphate of potassa; the sulphur of the alkaline salt combining with the lead on the skin, forms a dark discoloration.

When the active stage of the disease has passed off, vegetable tonics, wine, porter, and a nutritious diet, are essential in restoring the patient to health.

Prophylaxis.—On a careful review of all the facts connected with this subject, we would recommend the adoption of certain rules on the part of those who work in lead, in order to prevent absorption of the metal. Of these, cleanliness is of the most importance. One of the most simple, and at the same time, one of the most effectual means for preventing the attacks of poisoning from the employment of lead, is the daily use of the bath, so as thoroughly to purify the skin, and remove from the surface of the body all particles that may have been collected in it, shirt, clothes, etc., frequently changed; regular ablutions before meals; good diet, in particular, oleaginous ingredients.

Some of the proprietors of the lead works of this city have arrested the long continued prevalence of colic among their employees, by giving as a beverage a species of beer, to which sulphuric acid is added. In other works, sulphuric acid and water, lemonade, etc., is used with decided advantage. This converts the soluble salts of lead into an insoluble sulphate, which is inert.

ART. V.—*Long Retained Placenta.* By JOHN A. THOMAS, M. D.

Some time in April, 1858, I was called to see Mrs. W., a sister to the lady whose case of imaginary pregnancy I published in the E. M. Journal some time ago. Mrs. W. is a lady of wealth and intelligence, possessing a sanguine nervous temperament, about thirty years of age, and the mother of several children. On my arrival I found her suffering intermitting pain, resembling labor, with profuse uterine hemorrhage. She informed me that she had been *enciente* about three months, and feared that miscarriage would be inevitable. I told her I would make an attempt to arrest it, in which I temporarily succeeded. The next day however, I was again summoned to see her in great haste. On my arrival I inquired of her how she was getting along, to which she smilingly replied, "I am better, now," and removing the cover showed me a beautiful little specimen of an embryonic human being, which by her permission I have now, preserved in my "fœtal museum." At first sight I discovered that the umbilical cord was all attached to the fœtus, being severed at its connection with the placenta. Fearing that there would be some difficulty in delivering the placenta, I immediately made the effort, but could not detect any portion of it with the instruments that *Providence* gave me, (the fingers,) for I scarcely ever use any other instruments in obstetrical cases. I thought of the advice of Dewees,.Ramsbotham, Churchill, Beach, and others. I paused for a few moments, but as there was neither pain or hemorrhage, I thought I would "wait awhile with patience," and see what the "vis medicatria naturæ" could do in the case, having strong faith in the powers of nature. After preparing some medicines I took leave of my patient, telling her I thought there would probably be no difficulty, as I thought the placenta would slough and pass off in seven or eight days, but if hemorrhage returned to let me know it immediately. In a very few days she was up, attending to her domestic duties.

I saw her in a few weeks, and remarked to her that she looked unusually well, to which she replied, "my health was never better." She continued in the enjoyment of fine health for about six months, when I was again summoned to see her in great haste. On my arrival I found profuse uterine hemorrhage, as at first. I soon succeeded however in arresting it, but the next day about the same time of day, it again returned. Her tongue became coated, bowels costive, some thirst, and slight fever. . The disease assuming decidedly an intermittent form, I gave her alteratives and anti-periodics with astringents, but without effect, The third day, about the same time of day, the difficulty returned. I then began to reflect a little upon the past, made an examination per vaginam, and found the uterus contained a foreign substance of some kind. I could scarcely think it was the placenta, yet I could not imagine what else it was. She informed me that she did not think the placenta had passed away, and that a muco-sanguinous fluid had occasionally escaped from the vagina since her abortion. We were both certain that she was not *enciente*, consequently I administered liberal doses of oil of *ergotae*, (which I had also administered immediately after abortion with no effect,) and in a short time the placenta was expelled. It presented the appearance it usually does in the third month of pregnancy, and was nearly perfectly normal.

The above case is to me a very rare one, and thinking it may be of interest to the young practitioner, or afford a theme for a few hours' reflection by the medical philosopher and theorist, I offer it for publication.

Pleasant Hill, Ill., April, 1860.

PART SECOND.

SELECTIONS.

Animal Parasites of the Human Body. By C. A. HARTMANN, M. D., Cleveland.

From an extensive report of Dr. Kuechenmeister, in "*Schmidt's Jahrbuechern*," (B. 99, 1858, p. 89,) embracing everything published during the last year in reference to the animals subsistent in and on our body, we condense the most interesting facts established, interspersing them with the more recent discoveries and observations, as far as they have come to our knowledge.

The geographical range of the different genera and species, especially of intestinal worms, appears to be still far from being satisfactorily ascertained; the evidence so far adduced allows no definite conclusions whatever, and we will rather pass by that part of the report, than give the few points established.

I. HELMINTHOS.

A. INFUSORIA.

They have been found in human milk, in syphilitic and other purulent matter. T. W. Broesicke and A. V. Streubel ascertained (*Deutsche Klinik*, 37, 1857) their constant presence during certain diseases, especially Morbus Brightii and scarlet fever, at least in the year 1854. Albuminous urine, containing neither phosphates nor chlorates, was always found in connection with the parasites. These were mostly represented by *Vibrio rugula* Ehrh. Probably the infusoria, floating in the air, are carried to the lungs with the inspiration, penetrate into the capillary vessels, and find a more suitable habitation in the morbidly affected kidneys. Their appearance may be epidemic.

In the lower parts of the intestinal tract in two patients, laboring under gangrenous ulceration of the rectum and colon, Malmsten, (*Pr. Ver. Ztg.*, 51, 1857,) discovered large numbers of what he calls *Paramecium coli*, a small oviform and lively animal, copiously covered with vibratile ciliæ. They are not limited to the diseased part, but spread all over the mucous membrane, but not beyond the coecum. Their coexistence with ulceration is presumed to be accidental. An augmented secretion and peristaltic motion are the only symptoms of these intestinal parasites. To remove them, injections of muriatic acid are sufficient. A fuller account of these interesting parasites may be found in the *Nashville Journal*, December, 1859.

Dr. Udekum made the interesting observation that many, and probably all infusoria possess the ability of encysting themselves, either doing it for protection's sake,—for instance in evaporating fluids, or undergoing the process during their natural development. Inside of the cyst, the form of the animal changes, while it continually turns around its axis, until enabled to exist independently. A species of *Vorticella* in this way changes into *Acineta*, and this reproduces a ciliated embryo. In some cases a similar transformation takes place without the intercurring process of encysting.—*Journ. de Brux.*, Oct., 1857.

Ascaris Umbricoides is said to exist in five per cent. of all children, especially of the poorer classes, and not unfrequently in females until they reach the age of thirty years. Cases are on record, where 148, 160, and even 480 of these worms were voided from one patient in less than twenty-four hours. Whether these parasites can perforate the bowels, or not, is a question yet open. The ability to do so has been denied to them by Cruveilhier, Bremser and others; Brera, Prust, &c. admit the possibility, and attribute it to a kind of erection in the worm; the French physicians rather believe in what they call "ecartement," (being pressed apart) of the tissues. W. H. Wiltshire (*Lancet*, April, 1856,) thinks previous softening of some portion of the intestines to be the inductive cause.

M. P. Pinnoy saw the jejunum perforated by Ascaris, after a slight congestive condition (*Annal d'Anvers; Gaz. de Paris*, 14, 1856;) Rueckner (*Pr. Vr. Ztg.* 28, 1856) the duodenem, without any previous affection. Perforation by the same worms has been observed in parts shortly before implicated in an incarcerated hernia.

Total obstruction of the intestinal canal by ascarides is recorded by Halma, Grand and Saurel, (*L'Union*, 50, 1856.) An indolent, immovable, chronic tumor of the abdomen, disappeared according to Pockels, *Guensb. Ztschr.*, VIII. 6, 1857) after the expulsion of 103 ascarides by means of Filix mas and jalap.

Wiltshire saw the worm emigrate from the mouth without any vomiting. H. Anciaux and Bedel (*Bull de Ther.*, Sept. and Dec., 1856) inform us of the voiding of similar worms by way of the uterus; the latter author also refers to a boy losing his worms for a full month through the navel.

Schloss *Gaz. Hebd.*, I. 49, 1856) diagnosticated the presence of ascarides in the ductus choledochus; vomiting, excited by a cathartic remedy, brought up the parasites, and the symptoms of an incarcerated biliary stone, present until then, ceased instantly. Five similar cases are collected by Vidal. Some of these, however, are very doubtful.

The most annoying kind of all intestinal worms, *Oxyurus*, spare no age and no sex. Several instances are known, where persons of eighty years have been afflicted with them. The popular belief that these worms are most likely to come away during the time of the decreasing moon, is, singularly enough, sustained by some statistical tables.

Large doses of the powdered root of the male fern are said by Pockels to be very efficacious against Oxyurus as well as Ascaris.

Dr. Walther, of Bonn, has published (*Ztschr F. Wissensch Zool.*, VIII 2,) a number of valuable additions to the anatomy of both the genera just named.

Dr. Nath. Smith stated in the *Boston Journal* a few months ago, that he never failed to remove ascarides with the tinctures of assafœtida and aloes.

A simple injection of water with from five to twenty drops of sulphuric ether, according to the age of the patient, and repeated more or less frequently, as the case may require, has never failed to expel ascarides in the hands of Dr. Comperat, (*Med. Times and Gaz.*) "It must not be forgotten," adds the *Med. and Surg. Reporter*, "that cold water injections are themselves beneficial in this troublesome complaint. We have ordered them with much benefit, and in very obstinate cases we have, in combination with them, found great satisfaction in the use of the following pill, taken after dinner and at bedtime: ℞. Pulv. aloes gr. ii., Assafoet. Santonini aa. gr. i."

C. TREMATODES.

Giesker and Frey found two individuals of *Distomum hepaticum* in a swelling under the sole of the foot, which swelling had puzzled a number of physicians, showing no inclination whatever either to suppurate, dissolve, or indurate, in spite of its unmistakable inflammatory nature. A channel was discovered inside of it, and one day the two worms were accidentally pressed out. How they got to that place is a matter of conjecture. (*Mitthiel d. naturforsch. Gesellsch in Zurich*, 1850, Bd II., p. 89.)

The structure of the nervous system, the development of the eggs, and the highly interesting changes undergone by animals of this class, have been elaborately and excellently explained by Moulinie (*Mem. de l'Institut Genevois*,) and Walther, (l. c.) All. Trematodes are either not much changing ectoparasites, or manyform endoparasites, Aspidogaster alone exhibiting the peculiarities of both these families, with certain modifications.

The endoparasites are hermaphrodites and produce eggs, the yolk of which is transformed into embryonal cells, uniting into a ciliated embryo. The latter either dies after the development of another surviving form within itself, or changes while dropping the ciliæ. The new formation is called in either case a "nurse;" it is very simply organized, and lives parasitically in mollusca. Redia are those nurses formed out of a dying embryo; the others receive the name of sporocysts. Both of them change into larves or cercaria: the former by division, the latter by protuberances. The larves live in the water, and then encyst themselves until they reach some medium favorable to their ultimate transformation; or they cannot exist in water, in which case they are not submitted to any further alteration, until passively transported to the interior of some vertebrate animal.

D. CESTOIDS.

1. *Botriocephalus.*

All authors agree in explaining the infection of this worm by means of fishes that are taken as food extensively, wherever the parasite is found.

2. *Taenia and Cysticercus.*

The calcareous corpuscles of the cestoids, formerly considered as glandular organs, have been ascertained by Gulliver to be really calcareous, with a concentric structure; sometimes they contain crystals of pigment. Their formation is analogous to that of the bones and cartilages, arising from cellulous elements, and increasing in number with the age of the animal, they form a kind of skeleton.

Willshire and Daniel (*Lancet*, April, 1856, Oct. 1857,) confirm the origin of tape-worm from the so called pork-measles, as maintained by Kuechenmeister. While even the reports of ancient writers and extensive observations made lately afford ample proof, that this parasite is always preceded by largely partaking of pork or other raw meat, the assertions of Wood and Fleming sound rather strange, for according to them, the Americans suffer but rarely from tape-worm, and in Cincinnati, where it should be supposed to be frequent, it is unknown. All meat that goes through a certain degree of heat in its preparation for the table, is entirely innoxious, the germ of the parasite being inevitably destroyed by the heat.

Tape-worm has been found in children fed with raw meat, at the age of two, six and fifteen months. Female persons are much more subjected to it than men. Warwick gives 135 women in 206 patients. Graetzer and Joy pretend to have seen two undoubted cases of taenia in the fœtus.

Amongst the many remedies against tape-worm, Willshire places his confidence almost entirely on *Lastrae Filixmas*, (Borgand Presl.) The root of *Aspidium athamanticum*, referred to in the first number of this Gazette, under the name of *Panna-root*, and that of *Lastrae filixmas* (Moore) appear to be of similar virtue.

Gordon (*Med. Times and Gaz.* May 1857,) Hanbury (*Bull. de Ther.*, April, 1858) and Guibourt (*Jour. de Pharm. et de Chim.* April, 1858,) notice as a new and powerful anthelmintic, the coloring matter collected in India from the capsules of *Rottlera tinctoria*, and in that country known under the name of *Kamala* or *Reroo.* It is sold in the Indian bazaars under the form of a brick-red fine dusty powder, without any smell and taste; the carbonated alkalies dissolve it, alcohol, ether, and hot water not completely so. A resinous matter can be extracted by a repeated treatment with alcohol, and from a concentrated ethereal extract a crystallizable alkaloid has been obtained, which Th. Anderson of Glasgow calls *rottlerin*.

The kamala is exhibited medicinally in the East Indies against herpes, lepra, and also affections of the skin, but principally against tape-worm. Mackinnon expelled in Bengal the parasite in 66 cases, by a single dose of 6-12 grmm; he prefers the kamala to kousso and oil of turpentine. Anderson found three drachms a sufficient dose; to prevent the nausea, often excited by the powder, he proposes a tincture: 180 parts kamala with 380 parts of alcohol. Corbyn, Cardon and Leared, corroborate this evidence. The worm is expelled dead, with head and everything; evacuating remedies are seldom required.

Another new remedy for tape-worm has been pointed out by Prof. Hetet, of Toulon, in the Chinese ailanthus (*Ailanthus glandulosa*,) planted frequently on this continent as an ornamental tree. Mr. Hetet first experimented, using the powdered bark, the powdered leaves, the watery and the alcoholic extract of the bark, the resin and the oleo-resin. He then prescribed the powdered bark, in the dose of half a gramme, in three cases, expelling the worm without trouble. One fourth of a gramme would be the corresponding dose of the watery extract, one-fifth of a gramme, that of the oleo-resin. The resin in the dose of two-fifths of a gramme, rarely occasioned the expulsion of taenia.—(*Journ. de Pharm., et. de. Chemie.*)

Dr. Bouchut determined, upon these statements, to test the efficacy of the remedy. He found himself, however, so little satisfied with its operation, that he soon returned to the older method. The bark as well as the leaves of the ailanthus, given in powder, the former at from 16 to 32 gr., the latter at one drachm per dose for a child nine years old, caused, in combination with castor oil, the ejection of numerous disjointed fragments, but the principal parts of the entozoon did not come away, until the bark of the pomegranate root was exhibited.—*Journ. of Prac. Med. and Surg.*

From a statement of Dr. Dowler in the *N. O. Med. and Surg. Journ.*, elm-bark appears to be a very efficacious agent for the dislodgement of tape-worm. A little girl had been eating portions of that bark, prescribed for her brother (we infer that *slippery-elm bark* is meant.) Next day she passed about three feet of tape-worm. Considering this accidental, the doctor prescribed what he supposed a much more potent anthelmentic: a large dose of turpentine and castor oil. The administration of these remedies for three days, resulted in a pretty active purging, but no more portions of the worm appeared. Desisting from further medication, the child was directed to resume the use of the bark as before, chewing and swallowing it in moderate quantities, until the next morning several joints of tenia came away, and under the continued use of the bark, portions of the parasite continued to pass, sometimes several times a day. In seven weeks there were expelled about forty-five feet of worm, including the head, with fifteen inches of the body attached to it. Two weeks afterwards the use of the bark was advised again, and the next day several more portions were voided, among them one about six feet long, tapering to a thread-like termination. Six months after that time, the entire length of the pieces expelled, footed up one hundred and thirty-five feet! Whether they belonged to one or more worms, was not ascertained, but only one head and one tail (?) were observed, supposed to be parts of the same animal. Since the last estimate, in March 1859, there have been joints occasionally evacuated. We regard this as rather a big worm story. Under all circumstances was the examination of the parasite very superficial; the definition of the species to which it or they belonged, ought to have been at least attempted, and of the symptoms produced by it not a word is mentioned.

The pumpkin-seeds, employed against tape-worm in 1832, by Mongeney, (four ounces in eight ounces of honey,) and found equally useful by Brunet and Sarzamea in 1852, when mixed with equal parts of sugar and sufficient water to make a kind of electuary, were brought forward again in the *Bost. Med. and Surg. Journ*, a few months ago, with the following directions:

Procure sufficient seed of the pumpkin, (those grown in the West Indies are the best,) to make two ounces. After removing the outside shell of the seed, put them into a mortar and add half a pint of water; pound them well up and make a kind of liquid orgeat of them, which strain through a cloth. Drink this mixture in the morning on a fasting stomach. If it does not operate in the course of an hour and a half, take one ounce of castor-oil; drink all the time as much fresh cool water as the stomach can bear. After taking the orgeat, if the stomach is well rubbed with ether, and an injection of about sixty drops of it is taken, you will find it an assistant to the orgeat, but this may not be necessary. Should the first application of the remedy not answer, repeat it the next morning, and there is no doubt your complaint will be removed. The worm will leave all at once and probably entire."

In a subsequent number of the same journal, Dr. Rich. Soule reports a successful cure with the seeds of the marrow-squash given in the same way as the pumpkin-seeds.

The seeds of the bottle-gourd or calabash (*Cucurbita Lagenaria L.*) and of the melon (Cucumis Melo L.) have been recommended for the same purpose. Some French physicians prefer the seeds called *Giromont;* they appear to be obtained from several varieties of pumpkin or squash.

Dr. Delvaux expelled ascarides as well as tape-worms by the sulphate of quinia, giving from four to six grammes in twenty-four hours and afterwards continuing it in diminished doses. (*Presse Med.*, 1855.)

A few facts in regard to *Cysticerous* have been published in the August number of this Gazette.

The development of all cestoids from bladder-shaped embryos is not longer denied. Leuckart has shown in an excellent work on this subject (*Die Blasenbandwuermer und ihre Entwicklung,*) such a transformation for thirteen species of Tænia. According to him, the principal route of the *Cysticerous* belonging to *Tænia serrata* is the vena portarum, although these embryos have also been detected occasionally in veins of the stomach and mesenterium, in a chyliferous vessel and upon the serous covering of the bowels. The same way appears to be taken by *Cysticerous tenuicoltis*, the presence of which is always threatening danger from internal inflammations.

Cysticerous cellulosus, the embryo of *Tænia solium*, has been found frequently in the human body. During life it is almost impossible to discover its presence. Bouchot (*Gaz. des Hop.*, 20, 21, 1857,) saw it twice in the brain of children, one of which had died without any suspicious symptoms, but the other had been suffering from one-sided chorea. Lessing states in a letter to Kuechenmeister, that the body of an insane woman exhibited more than a thousand individuals of this cysticerous — they could be felt like strings under the skin, every muscle, the brain, its membranes and cavities, in short, every part of the corpse, with a partial exception of the liver and lungs were infected. The patient died from general dropsy. Krabbe (*Hospital Meddelelser*, Bd. I. p. 131,) published three cases, where the worm existed in larger or smaller number in the substance of the brain and on the pia mater. Berand mistook the same embryo for an echinococcus living in the muscles, (*Gaz. des Hop.*, 119, 1857.)

3. *Echinococcus.*

Leviscon (*Dissertations Echinococcus;* Gryphiae, 1857,) agrees with Von Seibold in considering all the Echinococci found so far in men and domestic animals as members of the same species, accounting for the variety in form partly by natural transformation, partly by changes arising from the quantity and quality of nourishment. Such a view, however, can not be accepted as a correct one.

In a report to the Royal Scientific Society of Denmark, Prof. Eschricht has furnished many new facts concerning the development and anatomy of Echinococcus. On the inner surface of the mother-cyst not only secondary and tertiary bladders are formed, with or without embryonal productions, called scoleces, but there may also be found cellulous structures, with many scoleces, hooked on. They have been called "smaller vesicles" by former authors; Eschricht names them more properly "nests," for they are really the starting-places in the development of these singular parasites. The third generation commences during the life of the mother, inside of the daughters; both secondary and tertiary formations appear to originate in different ways. On the whole, there is yet a great uncertainty on this subject.

Hydatides form a prominent disease in Iceland, being there commonly Echinococcus, and sometimes *Cysticerous tenuicollis.* By what means they spread among the population of Iceland, is not yet known. Guerault (*Gaz. de Hop.*, 116, 1857,) says that cattle there are likewise extensively affected. The parasite has been observed in all parts of the human body, causing on the outside a particular kind of swellings.

The following are the species lately observed in Europe:

1. *Echinococcus scoleciparens s. veterinorum* (*Rud.*) *s. hominis.*

A joiner, thirty years of age, came to one of the hospitals in Vienna, with what was thought to be a cystiform pseudoplasm behind the right lower jaw-bone. Splitting the swelling, Prof. Schuh discovered the white surface of an echinococcus, which was extracted without trouble. (*Allg. Wiener mediz. Zeitung*, 1, 1858.)

2. *Echinococcus attricipariens s. hominis* (*Rud*).

Rodolfi saw (*Gazz. Lomb.*, 2, 1857,) numerous individuals of this species inhabiting the brain of a woman, who died in consequence of them at the age of forty. Wirth noticed once three of these hydatides in the brain, one in the spleen, and several in the heart of one person. In both instances no secondary forms were visible, beyond small and still adherent vesicles.

In a post-mortem examination made by Levison (l. c.) on the body of a young man, several tumors observed on the abdomen turned out to be the coverings of hydatides infecting the liver and milt. The inner surface of the cyst was covered with tuberculous protuberances, hiding small secondary hydatides firmly attached to the walls.

The common form of Echin. attricipariens, has been observed by many authors, either in fertile or sterile colonies.

In the liver of a person who perished from *gangraena pulmonum*, the cyst of this Echinococcus was found, containing forty small hydatides, every one of which had again from thirteen to fifteen Echinocci already thrown out. (Journ. *Gaz. des. Hop.*, 33, 1857.)

A case examined by Prof. Luschka, (*Virch. Arch.*, X. p. 206) presented a multibocular Echinoccus, extending through the entire left lobe of the liver, the lymphatic vessels, and ramifications of the portal vein. The cyst contained, besides crystals of haematoidin, a few scoleces and many secondary cysts, which again sent out three or four branches, or divided themselves by notches.

Out of three tumors on the abdomen of a butcher's daughter, Oelschlaeger (*Deutsche Klinik*, 50, 1856,) obtained from one only hydatides, but without hooks and scoleces, to the number of four hundred. The chemical analysis of the fluid afforded muriate of soda, albumen and succinate of ammonia.

Roser, puncturing a hepatic tumor of three years' standing, counted twenty variously sized spherical vesicles coming out with the fluid contents. Nothing could be detected on their inner surface. (*Wien. Med. Wochenschr.*, 12, 1857.)

Brehme, (*Deutsche Klinik*, 39, 1857,) operated successfully on a girl of seventeen years. Besides a large swelling in the right hypochondriac region, she was troubled with a tuberculous disease of the lungs, with haemoptysis. The blood and purulent matter ejected, exhibited traces of hydatides; the tumor increased in size so as to cause considerable distress. It was evacuated by puncture; a good many Echinococcus-cysts appeared in the fluid, and the wound healed without any accident. Half a year afterwards, the patient died from pneumothorax. The post-mortem examination disclosed the hearth of the parasites, and the channel penetrating the lungs in an obliterated condition.

As far as the treatment of Echinococcus in the liver is concerned, Roser and Oehlschlaeger tapped the tumor without any preparation; Brehme induced first adhesive inflammation in the neighborhood of the spot he intended to puncture. Injections into the cavity were only employed by the last named writer; he used Lugol's solution of iodine, commencing about a fortnight after the puncture, and joins Velpeau, Richard and Weber, in their eulogies on this treatment. Thorarensen, a physician of Iceland, advocates electric acu-puncture as a cure for this disease.

A cyst containing fertile Echinococci was observed by Krabbe, in the lung of a girl who had died with an unexplained affection of the chest, (Leared, *Med. Times and Gaz.*, Oct., 1857;) Ullmann (*Ungar Zeitschr.*, VII. 40, 1856;) *Pockels* (Guensb. Ztschr., VIII. 6, 1857;) and *Gairdner* (Edinb. Med. Journ., Jan., 1857,) noticed the mostly sterile parasites in the sputa of the patient, which is generally the only symptom indicating the existence of hydatides in the lungs. It happens rarely that there is any other symptom, until the growing colony has produced extensive changes in the pulmonar tissue, and even then the first manifestation of a serious disease is called forth mostly by some accident, destroying the membranes of the cyst. Gosselin states the symptoms obtainable by a physical examination of the chest, in Iceland, to be very similar to those in pulmonary tuberculosis.

Therapeutical means seem to avail not much against Echinococus in the lung. Leared tried a thorough mercurial treatment with apparently good success; the circumstance, however, that he commenced it seven months after the appearance of membranes in the sputa, renders his case rather doubtful in regard to the curative effect of his remedies.

Velpeau extirpated a cyst containing Echinococcus attriciipariens, in a sterile condition, from the muscles on the axillary margin of the scapula. He found the parasites in two other cases, in the muscles of the same region; Demarest speaks of its existence in the muscles of the arm and leg.

II. INSECTS.

Huseman denies (*Wien. Ztschr.*, X. 1856,) the existence of phthiriasis as a disease *per se*, explaining the opinion so long prevailing to the contrary, by mistakes and ignorance.

A French girl, suffering from head-ache, giddiness, general irritability and itching in the nose, discovered grains and small animals in the secretions from the nostrils. This singular occurrence continued for more than half a year. Swoons and convulsions set in (once returning forty-five times in twenty-four hours,) as soon as the voiding of the larvae ceased. Delasiauve cured the girl with the vapor of paper-cigars, saturated with an arsenical solution, bringing away dead larvae in great numbers. Brulle, in Dijon, thought to discern six different species of insects amongst them. (*Gaz. Hebdom.*, I. 39, 1855.)

R. Leuckart has made a number of very interesting experiments with species of Pentastomum. His report (*Bull. de l'Acad. royale de Belg.*, Tome II. and III. 1857,) confirms the identity of *Pentastomum denticulatum* (*Linguatula denticulata*) and *Pent taencides*, previously asserted by Gault. Besides this, *Pentastomum constrictum* has been found infesting the human body. These animals shed their skin like all other insects. By feeding them to rabbits, or introducing them into the nostrils of a dog, their whole development can be noticed in the course of about six months. We pass rather reluctantly over the minute description given of their structure at different times of their growing, as the length this article has already obtained, compels us to desist from any further exposition at present.

A few remedies lately published against itch will bring us to the proper termination.

Laffont learned (*Jour. de Med. de Bord.*,) from a traveller, that gunpowder was much used in the colonies against scabies. Three parts of powder, incorporated with ten parts of molasses, constitute a mixture which is rubbed well on the whole body. The next day a bath is taken in water impregnated with soap, and the cure is finished. M. Laffont has used this friction in three cases of scabies, and has cured them radically. (*The Druggist*, Aug. 1859.)

Prof. Beck reports in *Schmidt's Jahrb.*, the great advantage resulting in itch from painting chloroform over the affected parts. Not only does the chloroform kill the worm, but it relieves also the irritation of the skin, produced by the scratching. The painting of even large surfaces was unattended with ill effects, and the temporary burning sensation was very supportable compared with the itching which it superceded.—[*Cleveland Med. Gazette.*

An Inquiry into the Character of Green and Melænal Discharges from the Bowels.

In the September issue of the N. A. Medico-Surgical Review, S. G. Armor, M. D., has a very interesting article under the above heading. From the days of Chomel to those of the late Dr. Golding Bird, nearly all authorities taught that green stools were an evidence of increased or perverted hepatic secretion. Calomel has been administered, and the resulting green evacuations from the bowels, it has been supposed, were the result of the stimulating action of this agent upon the liver, thereby increasing its biliary secretions. Dr. Armor takes issue upon these points, (a few others have previously done the same,) and attempts to prove that both ideas are contrary to facts. It is affirmed, "*First*, that biliary substances proper disappear in their passage through the intestines; *second*, that the characteristic color of the fæcal dejections depends not upon the chief constituents of bile, but upon its coloring matter, the contents of the bowels becoming stained by its presence, just as the tissues and fluids of the body become colored in jaundice."

It is claimed that if bile be present in green stools, it is so in diminished rather than in increased quantities. "From long and close observation, and careful analysis, Dr. Golding Bird arrived at the conclusion that green discharges have at least no *direct* connection with morbid biliary secretion, but that they are occasioned by a morbid exudation from the intestinal mucous membrane." This exudation is dependent upon two conditions: *First*, arrest of hepatic secretion, growing out of congestion (of the portal venous system); *second*, excessive acid fermentation of the fæcal contents, resulting from the absence of bile, as demonstrated by the experiments of Bidder, Schmidt, and others."

That green stools follow the administration of calomel can not be denied, nor that they are quite peculiar to the administration of this drug; but it does not necessarily follow as a logical sequence, that such discharges are evidence of quickened biliary secretion. "Hermann asserts, that powdered calomel, when triturated with yellowish-brown excrements, causes them to assume a greenish color." Armor says, "the green stools, which follow the administration of calomel, depend upon the presence of the sulphide of mercury. The analysis of Dr. Golding Bird, Simon, and others, show but a *trace of bile* in such discharges."

It is claimed that "the characteristic color of the fæcal dejections depends upon the presence of the *coloring matter* of the bile, and not upon the presence of bile proper."

There are some other points discussed, and facts enunciated in the paper before us, but these are the most important. These opinions, if subsequent observations shall prove them correct, will necessarily revolutionize many of our old opinions, and compel us to re-study the action of calomel in the system.

We hail with pleasure any observations upon this obscure subject. There are some practices we could never reconcile with the old opinions. If green stools were the result of excess of bile, why should calomel, which was supposed to increase the flow, be advised in the diarrhea of children, accompanied with such discharges? If calomel is a stimulant to the liver, why should it be depended upon in acute and chronic hepatis? The science of medicine needs all the talent that it can command to unravel its mysteries.—*American Med. Monthly.*

Powerful Mental Impressions a Cause of Deformity of the Fetus in Utero.

In the Reporter for Aug. 27th, is an article by Dr. ZEIGLER, on "Arrest of Development of the Uterus."

It has become so fashionable to decry, as "old fogies," those who have faith in the power of mental impressions of the mother over the fetus in utero, so as to cause deformity, that in some circles it is hardly safe to profess faith in such power. I have never been able to see anything so very unreasonable in the doctrine as some profess to think it. I beg leave to give you the history of a case from my "notes," and also a case as detailed to me:—

From Notes, March 12, 1854.—"To-day confined Mrs. C. Rowe, mother of two previous children; labor tedious; child a male; almost every part deformed; one foot drawn up and adherent to the side of the leg; anus imperforate; penis rudimentary. The child made a moaning noise, and lived about an hour. Could not get an examination after death."

Remarks.—Mrs. Rowe called upon me when she was in the third month of gestation, and stated that "she feared she had marked her infant." She had been visiting a friend, and while there a child had a fit, in which she was very much distorted, and had frightened Mrs. R. so much that she feared her babe "would look as it did." I tried to reason her out of it, but she remained in the same state of mind till her confinement.

Case 2.—Mr. W. showed me his abdomen, across which was a mark having every appearance of a large rattle-snake, and the skin over it was actually scaly. The account he gave me of it was, that "during the pregnancy of his mother, his father, to frighten her, threw at her the body of a rattle-snake he had just killed; it struck her across the belly and threw her into a fit, and when he was born he had this mark."

[*Phil. Med. and Surg. Jour.*

PROCEEDINGS OF THE ECLECTIC MEDICAL SOCIETY OF CINCINNATI.

CINCINNATI, *March* 2, 1860.

Pursuant to a call for a meeting of the Eclectic Medical Society of Cincinnati, the members convened in the Library of the Eclectic Medical Institute. The President and Vice-President being absent, Dr. Z. Freeman was elected Chairman pro-tem, who proceeded to make a few remarks relative to the object of the meeting, which was for the purpose of re-organizing the Society, and revising the Constitution and By-laws.

The following physicians were then elected members: Drs. JOHN KING, C. T. HART, I. WILSON, T. L. A. GREVE, A. J. K. MURPHY, J. A. HENSHALL.

The following officers were then elected for the current year:

JOHN KING, M. D., President.

I. WILSON, M. D., Vice President.

D. W. MC. CARTHY, M. D., Treasurer.

J. A. HENSHALL, M. D., Secretary.

Upon motion, it was

Resolved, that a committee be appointed to revise the Constitution and By-laws, and prepare a Code of Ethics; whereupon, Drs. R. S. NEWTON, Z. FREEMAN, JNO. KING, C. T. HART, and H. D. GARRISON, were constituted said committee.

Upon motion, the Society adjourned to meet at the same time and place, on March 9th, 1860.

JAS. A. HENSHALL, Secretary.

At a subsequent meeting the following Constitution, By-laws, and Code of Ethics were presented to the Society and by them unanimously adopted.

CONSTITUTION
OF THE
CINCINNATI ACADEMY OF ECLECTIC MEDICINE.

PREAMBLE:

The undersigned, physicians, hereby agree to constitute a Society, to be called the Cincinnati Academy of Eclectic Medicine, having for its object the promotion of medical science, and to be governed by the following Constitution and By-laws as a permanent rule, not to be changed, without the concurrence of two-thirds of all the resident members of the Academy.

ARTICLE 1.

The Academy shall be governed by the usual parliamentary rules, and shall have the power of adopting such measures, rules, and by-laws, as may be necessary and proper to forward the general interests of the members, as medical men. But no by-laws shall be adopted, nor tax laid upon the members, unless by the majority of two-thirds of the members present at a regular meeting, or at a special meeting properly called. Nor shall any resolution be considered valid and binding, unless one-half of the resident members were present at the meeting when it was adopted.

ARTICLE II.

The officers of the Academy shall be a President, Vice President, Recording Secretary, Corresponding Secretary, and a Treasurer, who shall perform the usual duties of such officers, and who shall constitute the Executive Committee of the Academy, for the general management of its affairs, and for the transaction of all business not delegated to special committees. These officers shall be selected by ballot semi-annually, at the first regular meeting.

ARTICLE III.

The Academy shall hold such regular meetings as may be appointed by a majority of the members present, at a regular meeting, or such special meetings as may be called by the executive committee, or by six members, with due notification of all in each instance.

ARTICLE IV.

The graduates of all respectable medical colleges, and physicians who have not obtained a medical diploma, but who have sustained a reputable practice for at least four years, and respectable Pharmaceutists, shall be eligible to memberships in this Academy.

ARTICLE V.

Any non-resident of this city who is a graduate of a respectable medical college, may become eligible to honorary membership in the Academy, by forwarding to the Corresponding Secretary such documents as certify to his respectable professional position.

ARTICLE VI.

Applicants for membership in this Academy shall deliver to the Recording Secretary their written proposition to that effect, accompanied by the recommendation of at least one resident member. All votes relating to membership shall be by ballot, and a majority of four-fifths of all the ballots cast shall be necessary to elect.

ARTICLE VII.

Any member may be officially censured, invited to withdraw, or expelled from the Academy, for improper conduct, by a vote of four fifths of the resident members at a regular meeting, *provided*, that a specific charge be made in writing, and that a due notification of two weeks be given of the time and action thereon.

BY-LAWS.

I. The Academy shall have a session upon every alternate Friday evening, in the Eclectic Medical Institute, commencing at 8 o'clock precisely.

II. The order of exercises shall be as follows:

1. Calling house to order, by the President.
2. Calling roll, by Secretary.
3. Reading minutes of previous meeting.
4. Election of new members.
5. Reading of Essays.
6. Discussion.
7. Report of cases.
5. Transaction of business.

III. At each regular meeting of the Academy, the President shall appoint two members, by their consent, who shall prepare and read, at the subsequent regular meeting, essays upon subjects selected by themselves. The President shall appoint a permanent committee of four, who shall prepare subjects for discussion, any member having the privilege of presenting a subject for said committee. The President shall first read all the subjects presented, then select one from the number, and read it to the Academy, and if a majority approve of it, it shall be the subject for the next discussion. If it be disapproved by a majority, then he shall select another, a vote taken upon it, and so continue until a subject be chosen. If the whole list be presented without a choice being effected, then the President shall name one which shall be the subject for the next discussion.

IV. It is recommended that essays be brief, but more than thirty minutes shall not be consumed in the reading of any essay, unless by special permission of the Academy.

V. Essays shall, as soon as read, be open to criticism by all the members, but no person shall be allowed to criticise longer than five minutes upon the same essay, nor more than once. Unless the style or nomenclature used perverts the true meaning of the author, it shall not be subject to criticism. After all the criticisms are delivered, the author shall be allowed to reply.

WI. Essays, as soon as delivered, shall be regarded as the property of the Academy, and a copy of the same shall be placed in the hands of the Secretary forthwith.

VII. At every regular session of this Academy, the President shall appoint a committee of two, who shall examine the various essays, and recommend for publication such as they may deem worthy of that honor.

VIII. The debates shall be governed by the usual parliamentary rules; Jefferson's Manual being received as authority.

IX. No member shall be allowed to speak more than once upon the same subject, until the members who desire have had an opportunity of expressing themselves thereon. Nor shall any member be allowed to speak for more than ten minutes upon any subject, unless by special permission of the Academy.

X. When a member is accused of improper conduct, according to the provision made in Art. VII of the Constitution, a committee of three shall be appointed by the President to investigate the truth or falsity of the charge, and report the same in writing to the Academy at a regular meeting, corresponding with the meeting terminating the two weeks' notification of the member. If there be found sufficient evidence to inculpate the member, he shall at once be placed upon trial, and shall have every fair means allowed him for defence. If, however, he does not attend the first meeting of which he has been notified, the trial shall be postponed until the next regular meeting, and of which the Secretary shall duly notify him; when, if he be again absent, or furnish no good reason, in writing or otherwise, for his absence, (to be considered and acted upon by the Academy,) the trial shall proceed, and he to be judged according to the evidence presented concerning his case. But if at the second meeting, a reason be offered for his absence satisfactory to the Academy, the trial shall again be postponed until the next ensuing meeting; when, if again absent, he shall be censured or expelled for contempt, according to the merits of the case. If, however, the said member shall subsequently appear, within six months after the preferment of the charges against him, and demand a trial, he shall be entitled to a hearing of his case, and the decision shall be in lieu of the action had in the charge for contempt.

XI. Five members shall constitute a quorum, for the transaction of all business calculated to carry out the objects of the Academy.

XII. Any amendment to, or alteration of, these by-laws shall be offered and laid over, until the next regular meeting of the Academy, and absent members may be allowed to vote on it by proxy, two-thirds of the votes cast being necessary to its adoption.

CODE OF ETHICS
OF
THE ACADEMY OF ECLECTIC MEDICINE, OF CINCINNATI, O.

Adopted March, 1860.

"No one point is more universally denied by the American people than the *exclusive right* of one set of men to judge and control anything."

"It is one of the strongest peculiarities of the American people, that they assume to themselves the right to think for themselves, and judging for themselves of all subjects, and then themselves taking the responsibility of their decision."

"It is a fundamental principle of a free people to *hear all sides*, *decide for themselves*, and abide the consequences of their decision."

"The law of our country gives some scope to personal liberty, in the exercise of *personal discretion* and *choice*, in matters not specified, involving individual, domestic and social relations, in which it is expected that we shall be governed by a sense of duty and obligation, resulting from the relations we sustain, together with the intelligence and sympathies of our nature, and our sense of justice. We may barter away a portion of this liberty, by social compact, if we choose: but for a party to enter this scope of territory and take it from us by force, is a high-handed measure. And more especially is it a high-handed measure, for a party, a *medical faction*, to require us to go contrary to our constitution, government and laws."

"In priest-ridden countries, any medicine not adopted by the profession is prohibited by law, and any religious opinions not adopted by the priesthood are outlawed and forbidden."

"It is certain, that in a republican government, tyrannical or despotic measures are out of place, and, with republicans, out of character. Such measures are contrary to the *genius* and *spirit* of our government, which took its character from the venerable patriots who were willing to risk *everything* for rational liberty and independence, for themselves and their posterity."

"*Medical faction* has constructed a *medical platform*, which is like the bedstead of Procrustes, to which a man must be made to conform by force; if he is too short, he must be stretched, and if he is too long, he must be *cut off*."

"The American Medical Association claims *supreme jurisdiction*, and, of course, they decide not only for *themselves* but for *others also*, in all matters which they may condescend to take into consideration. They do not acknowledge that their jurisdiction should be limited by the *law* or the gospel, by the *genius* of our government, or its *civil polity*, but, without much regard for either, they engage freely in the work of defamation just when it suits their humor."

"If any provide not for his own, and especially for those of his own house, he hath denied the faith, and is worse than an infidel."

"Those physicians have generally become the most eminent who have soonest emancipated themselves from the tyranny of the schools of physic."—*Dr. Rush.*

"Under God, we are determined, that wheresoever, whensoever, or howsoever, we shall be called to make our exit, we will die freemen."

"Every other Republic has fallen by the discord and treachery of its own citizens."

"Whatsoever ye would that others would do unto you, do ye also unto them."

"One great object of the American government, as we have before observed, and of the patriots who exerted themselves for its organization and establishment, has always been, to *fortify*, to *protect*, and *defend the absolute rights* of man, among which is that of *personal security*, which embraces the preservation of one's good name, and which gave rise to the provisions of the law against *slander* and *libel*."

"Every man has an undoubted right to occupy as high a station as he can before the public, and to make his skill and attainments known by all honorable means in his power."

Recognizing the general truths of the above quotations, and it having been positively and satisfactorily proven by experience that the spirit of the so-called regular profession and of their Code of Ethics, is adverse to the rights, feelings, and interests of the citizens of a free and enlightened country—to the rapid advancement of true medical science—and to "the greatest amount of good to the greatest number,"—the Academy of Eclectic Medicine of Cincinnati, Ohio, considering the profession of medicine to be a liberal one, hereby disclaim any past, present, or future connection with, or obligations to, the illiberal and tyrannical "Code of Ethics" of the self-styled American Medical Association, adopted May, 1847; and in lieu thereof, accept the following Articles, as a Code expressing the principles by which physicians should be guided in their professional intercourse:—

ARTICLE I.

The interests and rights of medical men are as dear to them, as are those of any other class of citizens in this Republic to themselves; they are entitled by the Constitution of this great Union to the same freedom and privileges in moral, social, political and civil life, as are individuals pursuing any other vocation; and any Associations or Rules which would deprive them of the least portion of these rights and privileges, are unwarranted usurpations, contrary to the spirit and intent of our American government, and, consequently, of no force in law or custom.

ARTICLE II.

The common rules and maxims of morality which are enjoined in the Bible, and have been recognized by the wise and virtuous at all times, and in every civilized country, are comprehensive enough in their scope, and sufficiently dignified in form to meet all the contingencies and emergencies which in a moral point of view are likely to arise in the transaction of business and the interchange of thought and sentiment between man and man.

ARTICLE III.

Medical men have an undoubted right to bring themselves and their claims before the public by every fair and honorable means, as much so as any other class of men. They may enter into general or special practice as they may consider best adapted to their interests, or to their peculiar views; they may introduce themselves to the notice of the public by printed cards or other publications, by public or private lectures, or by the publication of certificates of cures actually performed. But, while it is clearly the right of the physician to thus present himself in a truthful, modest manner before the community, as a candidate for patronage, everything like boasting or self-adulation, all efforts at bombastic display which evince a purpose to excite the wonder of the people and lead them to anticipate what probably can not be realized, and show at the same time on the part of the advertiser an unwillingness to trust his claims for public favor upon the simple truth, are highly disgusting to every right-minded person, and are entirely unprofessional. The presence of laymen at operations, is by no means objectionable if both the patient and operator are willing thereto, as it tends to make the skill and ability of the operator better known in his community, affords an incentive for medical men to perfect themselves in their profession, and cultivates a feeling of confidence on the part of the public which will lead them to seek for medical aid among the members of the profession instead of among those who, professing to practice medicine, are ignorant of its first principles.

ARTICLE IV.

Attendance upon the poor gratis, is certainly a Christian charity, for the doing of which no fault can be found with any one; yet in relation to this subject, as well as to contracts between patients and medical men, the laws and business customs of the country afford all the protection, and allow all the privileges which are necessary, and of which the physician has an undoubted right to honorably avail himself—being only careful, however, not to interfere with the claims which the profession generally hold upon him, for its security individually and collectively, by rendering professional services for less than the customary fees of his medical brethren who may be located in his neighborhood. If a physician candidly believes that he can effect a cure in any given case presented to him for treatment or advice, it is not only his right but his duty to so inform the patient seeking his advice.

ARTICLE V.

A medical man having invented any surgical instrument, or discovered any new and valuable medicine, it becomes his capital, and there is nothing unprofessional in his obtaining a patent for the same; if it is right for our government to issue patents to her citizens, it is equally right for them to hold patents; and if it is not right, in either case, no particular class of men or associations are exactly authorized to arraign the American government and her citizens for trial, and sit in judgment upon them. A physician may, in his own practice, employ a medicine or compound known only to himself; it is his capital, and there is no law in the country which can compel him to divide his capital among others by disclosing his remedy, save his own benevolence and philanthropy. He may also employ in his own practice any remedy of whatever character it may be, when the formula for its preparation is made known to him, and he deems it a useful medicine; nor does the fact of such formula being made known to him demand that he shall reveal it to others, unless by permission of the party to whom it actually belongs; honor, at least, would forbid such a treacherous revelation. But while no person is under obligation to make public all the formulas of his own practice, and while no practitioner should ever prescribe a remedy the composition of which he does not understand, it is certainly unjustifiable, unbecoming and unprofessional in any medical man to send out, to be purchased and indiscriminately used by community, medicines, whether patented or not, of the character and application of which they are as ignorant as they are of the physiology and pathology of the human body.

ARTICLE VI.

No person can be considered a physician who has not by collegiate attendance, or otherwise made himself acquainted with at least the practical portion of the departments of anatomy, physiology, surgery, materia medica, theory and practice, obstetrics and chemistry. Yet even among physicians thus recognized, there may be a great diversity of opinion upon medical matters, as we find to be really the case in the profession, at the present day; yet no physician should be slighted, abused, or treated discourteously, because of such differences. Freedom of speech and of thought, originally bestowed upon man by his Creator, are guaranteed to him by our government, and to refuse to recognize a physician, or to reject fellowship with him because of differences of opinion upon medical or any other matters, is anti-republican in spirit, evinces a narrow, illiberal, selfish mind, and renders the possessor of it a laughing-stock to all sensible persons.

ARTICLE VII.

The professional man should seek to combine in his character, 1. A thorough acquaintance with his profession; 2. Integrity, or unbending adherence to moral principle; 3. Self-respect, or a modest appreciation of what he is, and what he deserves; and, 4. Benevolence, or a generous consideration of the interests and feelings of his fellow men. These elements combined in the foundation of his character, and fully developed in his life, will constitute any man a true gentleman, and entitle him to a place in the highest ranks of moral excellence.

ARTICLE VIII.

With respect to the duties of physicians to their patients, ever bearing in mind the great responsibility resting upon them in the discharge of their profession, physicians should always display a promptness and willingness in attending to the calls of the sick; by this course they may not only be enabled to check disease at its commencement, but will also secure the confidence of patients and their friends, which, as every physician knows, is a very important point taken in connection with the treatment. Gentleness and kindness, with firmness, is the proper course to pursue with patients and their friends, yielding to the wishes of others whenever this can be done without jeopardizing the welfare of the sick, avoiding anything offensive or imperious; always, however, recollecting that the responsibility of the treatment and its result rests solely upon the medical man, who must, as long as a patient is under his professional care, constantly bear this in mind and exercise the proper authority over his or her management. The patient belongs to the physician as far as hygienical and therapeutical measures are concerned, until a cure is effected, or the physician discharged; and any neglect, inattention, or refusal to follow the directions of the attending physician, or any improper interference therewith, must necessarily relieve the physician from all censure and accountability in case of an unfavorable result originating therefrom.

Patients should be visited by their physicians as frequently as may be necessary to learn the peculiar character and progress of the disease, as well as the influence exerted upon it by the treatment pursued, but great care should be taken not to visit unnecessarily or too frequently, as this is calculated to needlessly alarm patients and their friends, impair confidence in the physician, and give rise to suspicions of mercenariness.

Patients should not be abandoned because of the incurability of their disease; the attendance of the physician may be the means of relieving them of much suffering and smoothing their progress toward the grave, besides being a source of comfort and satisfaction to friends and relatives.

A physician should display in the sick room a degree of cheerfulness consistent with the condition of his patients; he should comfort and cheer up the sick, encouraging them to hope when there are grounds for such encouragement, and manifesting the sympathy and interest he takes in their welfare in a gentlemanly and dignified manner. Levity in the sick room, discussions, or conversations concerning matters foreign to the condition or welfare of the sick person, are unprofessional, out of place, and highly censurable.

Misrepresentations of the seriousness of a disease for the purpose of impressing patients and others with the superior skill and ability of one's professional attainments, are wholly unprofessional. But when a disease is really of a serious character, the physician should not delay to apprise the relatives of the patient; and in some cases, in which the physician must employ his own judgment and discretion, the same may be made known to the patient, being careful to do so in a delicate and gentle manner, and always bearing in mind that the life of a patient frequently depends upon the words and manner of the physician in attendance.

In the practice of their profession, physicians frequently have confided to them, or in some other way become acquainted with, secrets of a moral, physical, domestic, or other nature, belonging to their patients; these should always be held sacred, never to be referred to by the physician, even in presence of the parties concerned in them, unless these commence the conversation relative thereto; and especially should they not be revealed to any other person by the physician, unless legally compelled to do so, or to clear his own reputation, should it become involved therewith. Neither is it proper nor professional for a physician to inform third parties, whether these be medical men or not, of the character of his patient's disease, in all cases, for there are many persons who shrink from having their diseases thus blazoned abroad, however innocent and unavoidable these may be; and such feelings should always be respected.

ARTICLE IX.

Physicians, their wives, their widows, and their children when under the care and authority of their parents, whether they reside at home or are traveling abroad, should be professionally attended by practitioners in their immediate neighborhood, whenever such attentions are required, without any demand being made upon them for the payment of fees; yet, should a fee or remuneration be offered the attending physician, under proper circumstances, as where the party is wealthy, etc., he should not refuse it, lest he impose upon the party a pecuniary obligation offensive to their feelings. In all other cases, the question of demanding and receiving fees rests wholly with the physician.

ARTICLE X.

Physicians should endeavor, as much as possible, to cultivate a friendly and kindly feeling among each other, notwithstanding differences of opinion upon medical subjects; and for the furtherance of this object, they should avoid misrepresenting or slandering any of their fellow physicians; they should avoid employing any direct or indirect means of destroying their patient's confidence in them, or of improperly securing the patronage of another's patients to themselves. They should, however, render their professional services to the patients of other physicians when these last request it, with or without fee, as may be agreed upon, and without seeking to supplant the regular attending physician; and should they be called upon to attend a case in the absence, from sickness or other cause, of the attending physician, they should at once yield the case to the physician upon his arrival or recovery, unless the patient, patient's relatives, or physician, request otherwise. The fees for all professional services rendered, unless otherwise agreed upon, should be paid to the party performing such services.

It is imprudent for a physician to visit the patient of another physician unless with the consent of the latter, as it may give rise to unjust suspicions and create jealousy and ill feeling; but, when a patient, under the charge of one physician, requests the visits of another for the purpose of ascertaining his views of the disease with which said patient is afflicted, such visit should be made; and the physicien, although bound to express his opinions fairly and candidly, should be extremely careful of the reputation of the attending physician; all such visits should be paid for upon the spot.

In all cases of accidents, sudden attacks of disease, etc., a number of physicians are frequently sent for; in such cases, in the absence of the regular attending physician of the patient or patients, the case or cases belong to the physician who first arrives, who should select, when this is necessary, from the others present, such assistance as he may require. The fees for such cases should be paid as promptly as possible.

The fees for professional services should be regulated in every city, town, village, or county, by the resident physicians of such places, and an adherence to them will tend much to establish confidence and harmony; but when a physician attempts to secure or monopolize a practice, by infringing upon the rights of others, as manifested, for instance, in rendering professional services for fees below those which are customary or tacitly agreed upon by the medical practitioners of his neighborhood, city, or town, etc., his fellow physicians may, with good reason, cease to affiliate with him any longer on account of such unprofessional conduct.

Whenever a patient becomes dissatisfied with his attending physician, and desires to dismiss him and employ another, he has a perfect right so to do, and the physician sent for may accordingly render his services to said patient; and this action of the patient and physician should not destroy the amicable relations existing between all the parties. But no physician should attend the patient of another, unless the two be in mutual attendance, until the previous physician has been formally dismissed.

ARTICLE XI.

In case of rare, obscure, eccentric, or dangerous diseases, consultations are often required, and frequently prove advantageous to the patient. As the object of a consultation is the welfare of the patient, physicians have the right to consult with whomsoever they choose, whether with medical men or not; at such consultations, they may candidly express their views, advise as to the course to be pursued, and prescribe, if requested, for which, of course, a fee should be demanded.

Consultations should never be held in the presence of the patient, but in some private place; and the presence of a relative during the consultation should not be objected to when this is requested, as it serves to satisfy that the physicians are really occupied with the patient's good, and tends to remove doubts and gain confidence.

When the consultation is between medical men, the attending physician should state his views first; and, afterward, should more than one be in the consultation, they will express their several views according to their age, commencing with the youngest physician first. When the selection of the consulting physicians rests upon the medical attendant, to avoid confusion, he should prefer those whose general medical opinions are the most in harmony with his own.

When, after a consultation, subsequent attendance of the consulting physician is requested in connection with the original attendant, it would be extremely imprudent, to say the least of it, for a physician to grant this request unless the original attendant be a graduate, or a non-graduate practitioner of four years reputable practice; to do otherwise, might lead to mortifications, misrepresentations, etc., which would seriously affect the reputation and patronage of the physician. However, in all these instances, much must be left to the circumstances of the case, and to the judgment and discretion of the physician.

When two or several physicians are attending a patient, they should, at each visit, agree upon a treatment to be pursued, and a time to meet again, and they should observe the greatest punctuality in their visits; but if, from any cause, any of the parties should fail to be present at an appointed meeting after a reasonable time, the previous treatment should be continued by the physician or physicians present, until the next meeting of the attendants. But in all cases of emergency, or when the condition of the patient is such as to demand it, any one of the attending physicians may change the treatment, of which he should notify the others at as early a period as possible, and at their next meeting explain his reasons for so doing; however, an unnecessary interference in the general treatment agreed upon, and clandestine or uncalled for visits to the patient, are reprehensible, and should lead to the dismissal of the offending individual.

When physicians attending a patient, can not agree upon the disease or the course to pursue, they may, by consent of the patient or his relatives, call in other medical assistance; or, the patient or his relatives, being informed of the character of the disagreement, may discharge and retain such of the attendants as they choose, without the discharged parties construing it into an offense or an unkindly act; for in these matters, patients and their relatives have their rights and privileges equally with the physician.

In all other matters pertaining to physicians in their duties to their patients, the public, and themselves, an observance of the ordinarily recognized rules of truth, morality, justice, and honor—a portion of which rules it has been the endeavor to introduce into this Code—should be rigidly observed.

PART THIRD.

CLINICAL REPORTS.

Newton's Clinical Institute.—Winter Session of 1859-'60.
Services of Prof. R. S. NEWTON.

REPORTED BY JAS. A. HENSHALL, M. D.

CASE 622.—Nov. 8. MRS. SMITH. *Paronychia, or Whitlow.* There is quite an extensive whitlow upon the ungual phalange of the middle finger; it is attended with great throbbing, and intolerable pain. A large quantity of pus has collected, and the finger has swollen to thrice its natural size.

"When did this first commence, Mrs. Smith?"

"About ten days ago, sir. It felt at first as if I had run a splinter in my finger."

"What did you do for it?"

"I put a poultice on it, to draw out the splinter that I thought was there, but it got worse, and now pains me so much that I am not able to sleep at nights."

All forms of this disease, gentlemen, are exceedingly painful. The reason is to be sought in the extraordinary expansion of the sensitive nerves upon the extremities of the fingers, and the unyielding character of their integuments and fasciæ. The patient, with a severe form of it, suffers for many days and nights without sleep, from painful tension and throbbing in the part. The attending inflammatory fever is sometimes severe, particularly after the formation of pus, which is always an early event in its history.

In those in whom the absorbent system is rather slow or dilatory, and the exhalent is active, the swelling extends to the back of the hand, and sometimes the whole of the forearm, and is attended with considerable heat and redness. Where the disease has been neglected or mal-treated—and especially in a strumous constitution—the bones of the articulation often become carious, or anchylosed.

[On account of the extreme sensibility of the patient, Prof. Newton administered chloroform, and then made a free incision to the bone.]

Nothing more is necessary but to apply Mayer's Ointment, several times a day.

Nov. 11.—Does not experience much pain; there is a small fungous growth, which is very common in these cases after having been opened; to this apply Sesq-Carb. Potassa, and continue the ointment.

Nov. 18.—Discharged, cured.

CASE 623.—Nov. 8. MRS. WRIGHT; aged 30. *Chronic Laryngitis.* This patient has been laboring under chronic inflammation of the larynx for several months, which organ is sore to the touch, and seems to be slightly ulcerated; the fauces and pharnyx are somewhat reddened and irritated, accompanied with a tickling sensation. Some time ago, she was the subject of an attack of rheumatism, some traces of which still linger in her system, as she complains of dull pains at times in her joints.

"Do you have any difficulty of breathing, Mrs. Wright?"

"Yes, sir; sometimes there seems to be a great weight on my breast, which makes me breathe very short."

"Do you have much cough?"

"I do not cough a great deal, but I spit up much white, ropy matter."

"Do you rest well at night?"

"Yes, sir; but I wake up in the morning with a very bad taste in my mouth, and my heart flutters after running up stairs."

The tongue indicates slight derangement of the stomach, but she says that the greatest difficulty is the soreness and hoarseness of her throat.

I will order the following, which you will find, gentlemen, very valuable in similar cases:—

R.—Syr. Styllingiæ Comp., ʒ ij.
Tinc. Sanguinariæ, 3 iv.
Tinc. Gelsemini, ʒ ss.
Tinc. Xanthox. 3 j. M.

Take one-half teaspoonful, four times a day.

℞.—Ol. Xanthox.,
Ol. Lobeliæ, *aa* ʒss.
Alcohol, ℥ viij. M.

Rub the throat, over the larynx, with this, several times a day.

Nov. 15.—Inflammatory symptoms of throat have subsided; scarcely any cough, and not much expectoration.

Continue treatment.

Nov. 22.—She says the throat is well, but she does not feel right; complains of dull pains in her knees and ankles; the larynx is slightly tender to the touch.

I will now order the following:—

℞.—Syr. Styllingiæ Comp.,
Syr. Simplex, *aa* ℥ ij.
Tinc. Opii, ʒ ij.
Potas. Iod., ʒ iss. M.

Of this, take two teaspoonsful, three times a day.

Dec. 13.—Discharged, cured.

CASE 624.—Nov. 8. W. KEYS. *Stricture of the Urethra.* This patient has been laboring under stricture of the urethra for eighteen years, it being a sequela to Gonorrhæ; he has been under treatment most of the time, and has been operated upon by several experienced surgeons, with but little, if any, benefit being derived therefrom. About six years ago, he was treated by Prof. Freeman, and was greatly benefited, so much so that he married shortly afterward, and thinking that he desired no further treatment, but within the last year or two he has been gradually getting worse; a few months ago, an abscess formed in the perineum, communicating with the membranous portion of the urethra, through which the urine dribbles almost constantly.

In this case, gentlemen, I propose to gradually dilate the urethra, by the use of bougies, and when that is accomplished, there will not be much difficulty about healing the urinary fistula.

[A small sized bougie was here passed into the urethra, and past the stricture—which is situated about the suspensory ligament of the penis—into the bladder, without causing any pain.]

I will also put him upon the following:—

℞.—Decoct. Uvæ Ursi,
" Altheæ, *aa*.

Let him drink of this freely.

January 3.—The stricture is now considerably dilated by means of the above treatment, and the abscess in the perineum is nearly closed, only a drop or two of urine passing in the course of a day.

Continue treatment.

Last appearance.

Case 625.—Nov. 11. Mary Fowler; aged 34. *Chronic Dysentery.* Mrs. Fowler has been afflicted with Dysentery for three months; the evacuations are very frequent, and attended with great tenesmus; she is very feeble and debilitated, is getting worse, and symptoms becoming more aggravated each day; tongue slightly coated; pulse small and frequent, and a constant pain in lumbar region.

"How often do you go to stool during the day, madam?"

"About twenty times a day, sir; but I only pass about a tablespoonful at a time."

"What is the character of your stools?"

"They are bloody and slimy, sir."

"Do you have much pain at the time of an evacuation?"

"Yes, sir; just before and after an operation, I suffer with a violent, throbbing pain."

Where the inflammation is confined chiefly to the colon and rectum, you will find it accompanied with great pain and tenesmus, with mucous and bloody discharges, frequently terminating in what is called bloody-flux. In the first stage of this disease, I generally give a cathartic, followed by astringents; but in this case I will order the following:—

℞.—Syr. Rhei et Potas. Comp., ℥ iv.
Tinc. Opii, ʒ ij.
Hydrastin, Quiniæ Sulph.,
Geranin, *aa* grs. xxv. M.

Take two teaspoonsful, four times a day; and apply a large Mustard plaster over the abdomen every alternate night.

Nov. 15.—Feels a great deal better; appetite good, and feels stronger; has only about four evacuations a day; pulse nearly normal. Continue treatment.

Nov. 29.—Discharged, cured.

Case 626.—Nov. 11. Patrick Murphy; aged 30. *Chronic Pleuro-Pneumonia.* About two months ago, this patient was attacked with bilious fever, followed by inflammation of the lungs and pleura. He has been under the treatment of a physician, who bled and blistered him, and you see with what effect. By auscultation, it appears that the left lung is not ca- of being fully inflated, and there is considerable gurgling in the upper lobe. The patient, you will observe, is in a constant tremor, showing great nervous prostration. He has at the present time a blister upon his right side, which he states was put there for a "*stitch*."

"Where do you feel the most pain in your chest, Mr. Murphy?"

"Mostly in the right side, sir; but I also have a pain in my left side, and it hurts me to breathe, sir."

"How is your appetite, Patrick?"

"Not very good, sir; I very often vomit after eating."

"Do you cough much, or spit up anything?"

"I have a dry cough, and I spit up a little tough, whitish matter, but very little; and coughing causes a great deal of pain."

"Do you have any headache?"

"Yes, sir, I sometimes have a pain in my forehead."

Pulse 120, and feeble; respiration hurried and labored.

"What is the state of your bowels?"

"I am very costive, sir; and am so nearly all the time."

You will observe, gentlemen, that this is a clearly marked case of chronic inflammation of the lungs, with a slight sympathetic irritation of the stomach and pleura.

In this case, I will direct an enema of salt water, every night and morning, and a sinapism over the stomach, and at the same time put him upon the following:—

℞.—Syr. Rhei et Potas. Comp., ℥ iv.
Fl. Ext. Xanthox, ʒ ss.
Tinc. Capsici, ʒ ij. M.

Take a teaspoonful, three times a day.

Nov. 18.—Improving finely; his cough has left him entirely; bowels regular; pulse 100, and stronger; appetite indifferent; tongue slightly coated.

Continue treatment.

Nov. 28.—Discharged, cured.

PART FOURTH.

EDITORIAL.

THE ECLECTIC CODE OF ETHICS.

It will be seen by reference to another part of this number, that the old Eclectic Medical Society of this city has been re-organized, its name altered, and Constitution revised.

The Academy, feeling the necessity of a Code of Ethics, which shall be a general guide to the practitioner, and unwilling to accept the stringent and tyrannical code adopted by the National Association in 1847, have prepared and issued one, by which they will in future be governed, and which we think is liberal, and should be adopted by all practitioners throughout the country.

The necessity for such a code has long been felt by some of us. As a body of medical practitioners, we claim to be free and independent, and will not consent to be arbitrarily ruled by any set of narrow, contracted principles, promulgated by any set of bigoted and illiberal men in convention assembled, who assume the prerogative of hurling their anathemas and excommunications against all such as have the audacity to deny their possessing the *jus divinum* to make absolute laws for others not properly represented. Although we have, we think very justly, held ourselves not amenable to this tyrannical code, but responsible to the laws of our land and those of morality alone, many of our practitioners have gone too far, and at various times committed acts which we do not regard as professional. The same sin is being constantly perpetrated by members of all branches of the profession, and we think it a very important matter that a set of rules be proposed and subscribed to, which shall be boundary lines of what is strictly professional. We therefore fully indorse the code, as adopted by the Academy of Eclectic Medicine, and all who subscribe to it have the privilege of regarding as unprofessional, the conduct of those who act in violation of the principles therein set forth. We urge that it be accepted by all other medical societies in the United States.

DR. HORACE WELLS, THE DISCOVERER OF ANÆSTHESIA.

We are in receipt of a pamphlet, setting forth the claims which the late Dr. Horace Wells, a dentist of Hartford, Conn., justly holds upon the profession, to be acknowledged as the original discoverer of Anæsthesia. Accompanying it, is a letter from the widow, containing a touching appeal that justice be done her deceased husband, and his memory be rescued from the oblivion which two designing and knavish men endeavor to cast upon it, by claiming for themselves the grand discovery. The evidence is irrefutable, and we are satisfied that Dr. Wells was the first to conceive and enunciate the glorious idea, that a man may become so completely intoxicated by inhaling nitrous oxide, or ether, as to be rendered insensible to pain under the severest operations. We can not too forcibly denounce, as disgraceful and unjust, the efforts made by W. T. G. Morton and Prof. C. T. Jackson, to snatch the laurels from the brow which, in justice, they should grace, and gain immortality themselves by appropriating the honors won by patient merit, untiring labor, and self-sacrificing experiment. Let us give honor to whom honor is due; and since the claims of Dr. Wells are substantiated, and sworn to by so many men whose testimony is above suspicion, we feel justified in urging that his name is the one that should be venerated and held sacred by the thousands of afflicted, who have been bequeathed "*immunity from pain*" while submitting to the most severe and terrible operations that the surgeon may deem necessary for the preservation of life.

CHLOROFORM, IN CHILLS.

Chloroform, when properly administered, is perfectly safe, and we can not consider valid the objections urged against its use by some members of the profession. It should be given slowly, and be sufficiently diluted with atmospheric air. Observing these precautions, we have administered it in hundreds of cases, with perfect safety and satisfaction. It is a favorite remedy with us, and we do not confine its application to surgical cases, but now always employ it when called to see a patient in the cold stage of intermittents. In this case it should not be given in a sufficient quantity to produce perfect anæsthesia. Its effect is immediate and highly satisfactory. The patient is at once relaxed, all suffering is removed, reaction soon comes up, and the hot stage is much shortened. We think all who may give it a trial, will be satisfied with the result.

RICORD.

It is possibly not known to many of our readers, that one of the principal medical notables, now flourishing in Paris, is an American. Philip Ricord was born in Baltimore, Dec. 10th, 1800; his parents were French. At an early age he manifested a taste for the study of natural history, and made several voyages with his brother, Alexander, to South America and Columbia, to collect specimens. At the age of nineteen he commenced the study of medicine at Philadelphia, but soon after left for France, in charge of some specimens of natural history, which were sent on by the French ambassador, Mons. Hyde de Newville. After his arrival he prosecuted his studies, and obtained his degree in 1826. In 1831 he was appointed surgeon to the *Hopital du Midi*, where he he has remained ever since, directing his attention specially to the study of venereal diseases. He is a man of pleasing appearance, open and frank, and has distinguished himself by his writings on venereal diseases, and for first instituting the practice of innoculation for diagnosing syphilis; also for his ingenious method of applying the ligature in cases of varicocele. His practice is very extensive.

RATIONAL TREATMENT OF FEVER.

Most practitioners do not treat fevers rationally, because they do not study the different conditions of the system, in which certain remedies should be administered. Diuretics, diaphoretics, and anti-periodics are all indicated, but should not be given in combination; each should be given at the proper time. When there is fever, all the secretions and excretions are stopped, and it is useless to attempt their re-establishment, until arterial excitement and nervous disturbance are first quieted. As soon as the fever begins to decline, the various secretory and excretory organs should then be stimulated to activity, so that the *materies morbi* accumulated in the blood may be expelled. When they are active, then anti-periodics should be used. If the practitioner be guided by the three following rules, he will have little trouble in subduing the prevalent fevers of the summer.

1st. During the febrile exacerbation, employ such remedies as will control arterial and nervous excitement. To accomplish this, nothing will be found to answer better than the following formula:

℞.—Tinc. Verat. Virid. gtts. x vj.
" Gelsemini, " ʒ j.
Aqua. Menth. Pip., ℥ ij. m.
Sig.—A teaspoonful every half hour.

The face, neck and arms should be frequently bathed in ice-water, cold applications kept to the head, and hot pediluvia employed.

2d. As soon as the frequency of the pulse declines, attention should then be paid to the secretions and excretions. If necessary, a cathartic should be administered, and the following diaphoretic and diuretic given:

℞.—Asclepias Tuberosæ, ℥ j.
Potassæ Nitras, ʒ jss.
Aqua Bullien, o. j.
Ft. decoc. Sig. one ounce every half-hour.

Diaphoreses may be aided by a vapor bath, prepared in the following manner: immerse, for a moment, four or five heated bricks in water, then wrap them up in old cloths, and saturate the cloths with whisky or alcohol. Place these around the patient in bed, and tuck the covering around so that the vapor may not escape. In a short time copious perspiration will be established.

3d. As soon as the skin and kidneys are active, anti-periodics should then be given freely. Three grains, at least, of quinine should be taken every two hours, combined with iron and such other remedies as the practitioner may think proper. As soon as the fever rises, the anti-periodic should be discontinued, and the same course gone through as already described.

If this plan of treatment be strictly followed, we are confident that continued fevers will be broken up in a few days, and the practitioner will rarely have a case of typhoid fever to combat.

BOOK AND JOURNAL NOTICES.

A NEW WORK ON MATERIA MEDICA.—With feelings of more than ordinary pride and pleasure, do we hail the advent of the second volume of "General and Special Therapeutics," by Profs. JONES and SCUDDER. Notwithstanding our high estimation of the authors—an esteem confirmed by a long and intimate acquaintance—we have endeavored to carefully examine this new candidate for public favor and pass upon it, according to the well established principle, that a new book which contains little or nothing new and useful, either in the way of matter or arrangement, is a fraud upon the profession, an act plainly calculated to cheat the student (and all good practitioners are habitual students,) out of both time and money. The work under consideration not only abounds with new and reliable information, but is arranged differently from any eclectic work extant. To the latter feature we wish to direct special attention; to fully appreciate the former, the work must be read.

The articles of our comprehensive Materia Medica are carefully arranged into classes, as Emetics, Cathartics, Tonics, Diaphoretics, Emmenagogues, etc., so that the practitioner who wishes to select an agent, *ex gr.* an emetic for a particular case, can in a few minutes review the entire class. There are the Lobelia, Ipecacuanha, Sanguinaria, etc., with all their properties, preparations and doses fully detailed. The arrangement goes further. Those agents of any class which are generally regarded as most eligible, are considered first, whereas those which are less reliable, or for some reason more objectionable, are assigned a more humble position. Another important feature of the work, is the cautiousness displayed in the description of agents whose true value has, as yet, not been determined. In the form of an appendix, are given general directions for the preparation of syrups, extracts, tinctures, etc.; also, over twelve hundred select formulæ, including all of our favorite compounds. The work is especially designed for students and practitioners, and to such it must prove invaluable. Orders for it should be addressed to Prof. L. E. Jones. H. D. G.

A MEDICO-LEGAL TREATISE ON MAL-PRACTICE AND MEDICAL EVIDENCE, COMPRISING THE ELEMENTS OF MEDICAL JURISPRUDENCE. By JOHN J. ELWELL, M. D., member of the Cleveland Bar. New York: John S. Voorhies, No. 20 Nassau st. Cleveland, O.: Alfred Elwell & Co. 1860.

It affords us much pleasure to welcome to our table, Dr. Elwell's "Treatise on Mal-practice and Medical Evidence." A work of this kind has long been needed. The teaching of Forensic Medicine is too much neglected in all of our Medical colleges, and the subject is scarcely ever studied by our physicians, after they commence active practice. Indeed, the practitioner is usually ignorant of the rights which the law guarantees to him, from the fact that they are embodied in a great mass of other legal matter, which he has not time or inclination to examine, and which our works on medical jurisprudence do not clearly set forth. The legal and medical professions have both felt the want of a concise treatise, embodying principles of law and medicine, so connected that their bearing upon litigated subjects of a medico-legal nature may be readily perceived. Dr. Elwell, formerly a practitioner medicine, and now a member of the Cleveland bar, from his intimate acquaintance with both professions, is well qualified to produce such a work, and the one now under consideration fully satisfies the *desideratum*. We consider it a book of great merit, and one that every physician or lawyer should possess. For sale by Robert Clarke & Co. Price $5 00.

The San Francisco Medical Press, Issued Quarterly, at $2 00 per annum, in advance. Edited by E. S. Cooper, A. M., M. D.

A number of the above journal, which has just come into existence, has been received. We judge from the specimen before us, that its editor will take a bold and independent position, sustain truth and combat error without fear, and make his journal readable and instructive, and deserving of liberal patronage. We wish him all success.

The British and Foreign Medico-Chirurgical Review, or Quarterly Journal of Practical Medicine and Surgery. New York: S. S. & W. Wood, 389 Broadway. Price $3 00, in advance.

The April number of this valuable and ably conducted Quarterly is at hand, containing many excellent reviews and much interesting and practical matter.

The Chemist and Druggist: A Monthly Trade Circular.

We have received the above publication, and find it to contain much valuable information, especially to the chemist and druggist, to whose interest it is principally devoted. It gives a monthly Price Current of all the leading Drugs and Chemicals in the London market, and discusses the various pharmaceutical topics of the day. Address C. F. Hinrichs, 150 Broadway, New York. Price $1.25 per annum.

EDITORIAL ABSTRACTS AND CLIPPINGS.

On the Use of Oxalate of Cerium in the Vomiting of Pregnancy.—By Dr. J. Y. Simpson, Edinburgh.—Cerium is one of those rare and little-known metals which were first discovered in the early part of the present century, and is found chiefly in the Scandavian mines, combined in small proportions in various minerals. I believe that any of the other preparations of the metal would fulfill the indication equally as well as the oxalate, which is used simply because it is the most easily procurable salt of cerium in the market; oxalic acid being used to separate the cerium from the metal with which it is most generally combined in nature, namely, didymium. The action of cerium on the stomach seems to be that of a sedative tonic, resembling in some degree the action of the salts of silver, and bismuth; and I have seen it succeed in curing the most obstinate cases of vomiting so much oftener, and so much more speedily than any other remedy, that I have come of late to have great faith in its employment. I would not lead you to suppose that by the administration of a quantity of the oxalate of cerium you will succeed in curing every case of vomiting, or even in alleviating it in every case; but I am certain that you will find the remedy successful in a larger majority of instances than you will find in any other one drug. You may give one or two grains of it, three times a day or oftener, in the form of a pill, or mixed with a few grains of gum tragacanth, in the form of a powder. The vomiting usually ceases after a few doses have been taken; but in some cases it does not abate till the remedy has been persevered with for several days. The effect is sometimes instantaneous. I had a patient some time ago from the west of Scotland, and when her husband first came to ask me to visit her I was engaged and could not go, but after hearing his account of the case, I gave him a prescription of cerium pills, which I desired him to administer to his wife till I could get to see her. He came back next morning, asking what the medicine was which I had given him, for the effect of it had been like magic. The vomiting, which had been going on almost incessantly, and which nothing seemed to have the power of alleviating, ceased upon the administration of two doses of the cerium. In a previous pregnancy in this patient it had been made a question for a medical consultation whether abortion should not be induced, to save her from the effects of uncontrollable sickness and vomiting. But the good result is, unfortunately, not always so immediate. One of the earliest cases in which I employed it was in the case of a lady who came from Greenock, when she was pregnant for the fourth time, and had arrived to between the third and fourth months of gestation. For these three or four months she had been always vomiting many times a day, and often during the night also; and that whether the stomach was empty or full. She could take but very little food, for she always sickened at the sight of it. It had been the same all her former pregnancies; and on the occasion of the first of them the vomiting was so severe as to bring on a miscarriage, and the patient's own life was despaired of. She got, first of all, one grain of oxalate of cerium, but vomited three hours afterward. She was then told to take a grain every three hours for a day, and afterward one grain thrice a day. This was successful in checking the vomiting, and a few days afterward she left Edinburgh, feeling quite well, eating her meals heartily, and free from all sickness. Everything had been tried by different medical men in the west which afforded any prospect of relief, as creosote, prussic acid, bismuth, lime-water, ice, champagne, opium, blisters, etc., but all without effect. The only thing from which she ever experienced any benefit, and that was only very transient and temporary, was calcined magnesia. Yet it only required a very few doses of oxalate of cerium to produce a perfect cure. Shortly afterward I saw with Dr. Craig, of Ratho, a case of severe and persistent vomiting in pregnancy, where he had tried everything; but in vain. She, too, was cured by a few doses of cerium. When the propriety of entering this and other modern remedies in the new Pharmacopœia to be published by the Medical Council was lately debated, it was objected that so little of the drug is used that it was not worth while classifying it among the other recognized medical agents. But on making inquiry lately at the drug shop of Messrs. Duncan, Flockhart & Co., in this city, I was told that they had sold as much as sixty-four ounces during the preceding twelve months, and I feel assured that it only requires to be more widely known to make it more extensively esteemed and employed as a general metallic sedative tonic.—*Med. Times and Gazette*, Sept. 17, 1859, p. 280. (*Braithwaite*).

It is said that the deaths by consumption among the stone-cutters of Quincy, Milton, Rockfort, and the marble works of Vermont, since they have ceased shaving, have decreased fifty per cent. Thousands of artizans, whose employment is prejudicial to healthy lungs, have decreased their liability to disease in the same or greater proportion by letting the moustache grow.

Of the Chlorate of Potash.—By Dr. FOUNTAIN, New York. —Dr. Fountain states that he became acquainted with the remarkable power exerted by this highly oxygenated salt in mercurial salivation in 1857, and consequently long before this had been observed by Herpin and others. In charge of the Hospital of the Panama Railroad Company, at Aspinwall, he often met with ptyalism in consequence of the free use of mercury, the peculiar type of disease met with on the isthmus rendering it necessary. Finding the various local applications of little avail, and recollecting Dr. West's recommendation of the chlorate in stomatitis of children, he gave in a bad case twenty grains every three hours, besides using it also as a wash. The effect was almost magical, and subsequent experience has only confirmed its efficacy. And Dr. Adler, engaged in the same service, says:—"Such has been the uniform success following the administration of this salt, that from my own experience I consider it as a specific. It has never failed." In some cases where mercury had to be given for a long time, and danger of ptyalism was feared, it has been given as a prophylactic, and, as Dr. Fountain believes, with good effect. Dr. Fountain also gives an account of the advantage he derived from the use of the chlorate, in Iowa, when, owing to a deficiency in the supply of vegetables, and poor persons living on salted meat, and the cheapest food, a mild form of land scurvy broke out—the manifestation of the disease being confined to its local effect on the gums, without the production of constitutional symptoms. Recovery rapidly took place under its use, even when the diet remained unchanged. In ulcerative stomatitis he has never known the salt to fail.

The author's chief object, however, is not to add illustrations to facts already known, but to call attention to a practical application of the chlorate not yet much noticed. It is as *oxydising remedy*, capable of coming to the aid of the respiratory process; and of stimulating secondarily the function of absorption, that its agency acquires a vast importance. This was first exemplified to him in a case of cyanosis from heart-disease, in which the blue color was remarkably removed during the employment of the chlorate; and two cases are also given, one in which respiration was impeded from effusion of blood into the thorax from a wound of an intercostal artery and the other an example of excessive dyspnœa from hydrothorax—in both of which the recovery seemed to be due to the use of the chlorate, which "supplied the blood with oxygen sufficient to sustain life during the time when respiration was seriously impeded." In a case of pneumonia typhoides, in which the imperfect æration of the blood was the combined effect of an asthenic fever and a local engorgement of the lungs, the same benefit followed its administration. "The chlorate may answer another and valuable purpose in *promoting absorption.* It readily parts with its oxygen by the influence of a moderate degree of heat, or a weak acid; both of which exist in the body in sufficient amount to effect the decomposition to a greater or less extent. This is the theory; and practical confirmation has been made by the cases herewith reported. If by increasing the amount of oxygen in the blood, we enhance its power of removing deposits, then do we have in the chlorate another property of extensive application and great practical utility. It would render it doubly applicable to all cases where respiration is impeded by effusion within the chest of liquids or solids requiring decomposition for absorption, such as hæmatothorax, empyema, and the hepatised stage of pneumonia. As most of the products of inflammation consist of protein compounds in some form or combination, the addition of one or two equivalents of oxygen render them soluble by conversion into the deutoxide or tritoxide, and permits their absorption by endosmosis into the adjoining vessels. Even tubercular deposits are known to consist principally of protein compounds; and we all know that the most effectual means of retarding or preventing their development consists in active out-of-door exercise in the pure air of the country, by which the system is more freely supplied with oxygen, and the effete products of interstitial decay more rapidly removed."

"The chlorate of potash has been quite generally used as one of the favorite remedies in *scarlatina.* I think that it is justly so regarded, and has fallen into some disrepute of late by the error of depending too much upon its unaided influence. It has generally been given with the idea, that in chlorine, something like a specific or antidote had been found for the poison of the disease. Now, in truth, the chlorate is a very valuable remedy for meeting particular indications in the treatment of this disease; by arresting the ulcerative inflammation of the fauces, and by its arterialising properties, supporting the recuperative powers of nature when aided by other appropriate treatment. In this connection I will state, that I have been in the practice, of late, of giving it in combination with carbonate of ammonia, with the best effects. Other aids must vary according to circumstances; but I will mention two which I have found of great value in almost all cases—the application of pure nitrate of silver to the fauces, and of glycerine to the whole surface of the body. Some considerations induce me to think that it is not the chlorine, but the liberated oxygen, which constitutes the chlorate a remedy of value in scarlatina and kindred diseases."—*New York Journal.*

Constipation in Children.—Wherever, for the last few years, I have met with obstinate constipation in infants, I generally succeeded in giving speedy and full relief, by ordering some sweet sugar-water to be taken every day, beside the breast. I am satisfied that the chief cause of constipation in nurslings is the insufficiency of sugar in the breast-milk, the proportions of which are naturally not the same with every mother. Wherever caseine exceeds the proportions of the other parts of the milk, it becomes indigestible, by a relative want of lactic acid in the contents of the stomach and intestines.—DR. JACOBI, *in New York Journal of Medicine.*

Not long since, the remains of a human head, of an enormous size, were found in a load of Peruvian guano, at Petersburg, Virginia. Last week, in a load of guano received at Norfolk, there were found the vertebra of a human being, which was about twice the size of that portion of the human frame to be found in those now living. This would seem to be a proof of the existence at some anterior time of a race of giants in Peru. Various bones have also been found of great size, all of which have been pronounced human.

The Male Fern in Snake-Bites.—We learn from the "Journal of the Society of Arts," that a public trial has been made in Melbourne of the value of an antidote for snake-bites said to be known to a Mr. Underwood. The experiments were made in the rooms of Messrs. Easy and Co., Auctioneers, Collins-street, in the presence of about five hundred spectators. The snakes employed by Mr. Underwood were a whip-snake, about fifteen inches long, and two diamond snakes, one about twenty inches, the other three feet six inches, in length. The larger of the diamond snakes Mr. Underwood provoked till it bit him on the lower part of the forefinger. A rabbit was bitten several times by the whip-snake; but neither the rabbit nor Mr. Underwood appeared to be in any way inconvenienced by the bites. The experiments were declared, however, not to have been satisfactory, and the secret of the antidote was not revealed.

In the same journal is inserted the following extract from the "Hobart Town Mercury:"

"According to the 'Cornwall Chronicle,' 'the secret so long confined to the heart of Mr. Underwood,' in reference to his antidote to the bite of snakes, has at length been discovered, and the common male fern—*polypodium filix mas*—is stated to furnish the remedy. This very common plant has been long known as a specific in the cure of worms, especially the tapeworm—the powdered root being generally used for this purpose; but from circumstances which have transpired it would appear that Underwood uses a decoction, or broth, of the leaves near the root, as being stronger, perhaps, than those near the apex of the plant. Its power might probably be augmented if used in the form of a tincture; that is, with an ounce of the leaves steeped for a fortnight in a pint of rum or brandy; in which state it could be kept for any length of time, if well corked, without deterioration by fermentation or otherwise."—*Lancet* (*Braithwaite*).

Laudanum in Weak Vision of the Aged.—Professor Nascar, of Naples, says, that in case of aged persons whose sight is becoming enfeebled and requires the aid of convex glasses, great advantage is derived, supposing no nervous lesion exists, from painting every evening the eyelids and brow with laudanum, and allowing this to remain on all night.—*Medical Times and Gazette.*

Iodide of Potassium in Hydrocephalus.—By Dr. CARSON, Coleraine, Ireland.—[The fourth volume of the *Retrospect* contains a very interesting paper by Dr. Roeser on the exhibition of iodide of potassium in the last stage of acute hydrocephalus.]

When I saw this paper in 1841, I had a case of hydrocephalus on my hands. The patient was, as far as I could judge, completely hopeless. All the ordinary treatment, such as leeching, cold applications, extensive blistering, mercurial action, etc., had been adopted without the slightest benefit. The child lay insensible for a considerable time, with dilated pupils, squinting eyes, and frequent convulsions; he was in the last stage of the disease, and apparently near his end. I gave him two grains of the iodide of potassium every second hour, and he made a perfect recovery. I have had another opportunity, during this present month, of testing the value of this plan of treatment. Miss ———, aged five, after a slight term of gastric derangement, was suddenly seized with an attack on her brain. The acute stage was not violent, and passed speedily over. But the effusion progressed steadily in spite of mercurial action, blisters, etc. She was incapable of being raised, and passed urine and fæces without being conscious of it. The pupils were as wide as they could be, but there was neither squinting nor convulsions. There was not the least sign of improvement at the end of twelve hours after the mercurial action was established. I then put her on the two grains of iodide of potassium every second hour, and stopped all other treatment. On the second day the sensibility had so far returned that she could be annoyed by rubbing the blistered surface on her head, and she was aware of the calls of nature. On the third day she cried when moved on the pillow, and at the end of the fourth day she was perfectly sensible, and the pupils had returned to their original condition. She progressed rapidly after that, and is now as well as ever.—*Med. Times and Gazette.*

On Sloughing Bed-Sores in Cases of Paraplegia.—By Dr. BROWN-SEQUARD.—It is remarkable that sloughing often occurs at a part in which there has been no pressure. We have hitherto considered sloughing to be due to the pressure on the paralysed part, but this explanation of sloughing can not be admitted. If it were only pressure that was the cause of sloughing, we should find it coming on after a long time—after fifteen days or a month: whereas, we know that in fact it sometimes comes on a very few days after the injury to the spine, when it could not possibly have arisen from pressure. Neither can it be caused by the urine having come into contact with the part. Sloughing, therefore, must arise from some other cause, and that cause must be irritation of the cord—a fact which I have ascertained by experiments on animals. I have observed also a case in which, in consequence of a severe blow on the forearm, the patient suffered something similar in the formation of phlyctaenæ on the hand, which, on breaking, became ulcerated. In my experiments on animals, I found that injury of the cord was followed by this sloughing in parts not subject to pressure. Seven or eight cases of this kind have been recorded. I have also ascertained, by similar means, that this sloughing may be prevented; or if it has already occurred, that it may be cured, sometimes with great rapidity. The means I have employed and found to be most successful to prevent the formation of sloughing in an animal, when it has begun and not gone very far, are very simple; they are quite in accordance with the views I entertained on the subject, and have fulfilled more than I expected from them. My treatment is, alternating hot and cold applications. I apply sometimes eight or ten times a day, morsels of ice to the parts threatened or affected, and then after the application of the ice, which of course causes contraction of the blood vessels, I apply a kind of poultice which is very hot, and of course produces a reverse effect. By these alternations of extreme cold and heat, I produce a change in the circulation of the part, and a consequent change of the nutrition of the spinal cord. I have seen sloughing in a dog, which had gone almost to the bone, cured in two days. The sloughing was stopped in its progress, and from that time there was no recurrence of it. In other animals, where the disease had not progressed so far, the cure was very rapid indeed. Another means which I have employed, and which I have found to be efficacious, is the galvanic current. This does much good, but it has not the power of the alternative treatment with the ice and hot poultices of which I have spoken.—*Braithwaite's Retrospect.*

Prolapsus Ani.—By Dr. THOMAS WOODS, Parsontown Workhouse Infirmary.—Biddy Grattan, aged six years, suffering from prolapsus ani for nearly two years. The prolapsed part can not be returned; it is about three inches, and the size of a lemon. The mucous membrane lining the tumor is congested. The child is emaciated and cadaverous. A large abscess is forming on the thigh. There is occasional diarrhea, and no appetite.

The prolapsed rectum was rubbed over with nitrate of silver in substance. The protruded part became smaller, and the nurse was able to return it, but after a few hours it came down again. Strong nitric acid was then applied, by drawing a glass rod, dipped in the acid, over the protruded bowel, a quarter of an inch wide on each side. The bowel was then returned, but it prolapsed the next day. The application of the nitric acid was repeated, a little more liberally; the bowel was returned, and remained so for two days. The child got meat and ate it. When the bowel protruded, it could be seen that where the nitric acid was applied the mucous membrane was removed. The nitric acid was again applied, the bowel returned, and it did not again come down. The acid was put on the prolapsed bowel by drawing it in the way first mentioned four times in the week; and the child perfectly recovered. The abscess which was forming on the thigh disappeared by absorption; and in about two weeks after, the bowel remained permanently up. The child—who for the last two years was a most miserable looking object, emaciated, suffering, and constantly confined to bed, with a poultice to the prolapsed rectum—gained a healthy and cheerful look, and became the fattest pauper in the house, with good use of her limbs. The cure is permanent.—*Dublin Quarterly Journal.*

Fissure of the Anus.—One of the most painful affections situated in the neighborhood of the anus, is a fissure alongside of the sphincter. When examined, scarcely any lesion is to be detected; but on rendering the structures tense, a very small slit with reddened margins may be observed, and from which there may be a little secretion. This apparently trifling malady occasionally causes the most intense agony. Latterly, several examples have come under Mr. Hancock's care at the Charing-cross Hospital, which have been effectually cured by the division of a few of the muscular fibers of the sphincter at the situation of the fissure. It is unnecessary to divide the entire sphincter in the treatment of this affection, and it is now seldom resorted to. On the 2d instant, this operation was repeated by Mr. Hancock on a woman twenty-seven years of age, whose sufferings have been very great for nearly twelve months, from the presence of a fissure of the kind mentioned. On passing her motions, the sensation was compared to that of a knife running through her. When we saw her on the 7th, five days after the operation, she expressed herself as completely relieved; all pain had gone, her health had generally improved, and she was beginning to assume a cheerful aspect. Patients with a fissure of the anus have a care-worn and anxious expression of countenance, more so than is observed in fistula of the bowel; but it quickly disappears when surgical relief has been obtained.—*Lancet.*

Antidote to Strychnine.—Dr. Bewley, wishing to kill a mangy cur, and having read in Magendie's "Report on Strychnia," that the sixteenth of a grain will kill the largest dog, determined to make sure of this very little animal by giving it about half a grain. But either Magendie's statement was incorrect, or the drug was adulterated, for at the end of ten minutes the dog, though suffering frightfully, was not dead. Dr. Bewley resolved to put him out of his misery at once, and accordingly mixed half a drachm of prussic acid with a little milk, and put it under the dog's snout. He lapped the milk with avidity, and in less than a minute vomited, got upon his legs, ran away, and recovered.—*Med. Times and Gazette.*

Beneficial Effects of Pepsine in the obstinate Vomiting of Pregnancy.—By Dr. Le Gros.—In the great majority of cases the vomiting of pregnancy may safely be left to the influence of time; but there are some cases in which females are scarcely able to retain in their digestive system a sufficient amount of nourishment to support their existence, and are therefore reduced to the last degree of emaciation. In some, also, the shocks occasioned by this obstinate and repeated vomiting become the source of abortions, which might have been prevented by moderating the activity of the morbid phenomenon. A very remarkable case was related in 1856, by M. Teissier, Professor of Clinical Medicine at Lyons, showing the immediately beneficial effect of a dose of pepsine in a case of vomiting during pregnancy. In this case the symptoms resisted all the ordinary methods which were employed, and the patient was unable to retain in her stomach any substance whatever. Under these circumstances, the patient was brought to M. Teissier, who found her in the following condition:—The vomiting had continued for two months, and she was at the end of the fourth month of her pregnancy; she presented the appearance of a skeleton, having the aspect and the cough of a phthisical subject; the pulse was 140, and M. Teissier thought at first that the case was one of pulmonary tubercle. Finding that all treatment had been hitherto inefficacious, and that the lady was actually dying of inanition, he was seriously meditating upon the propriety of inducing abortion as a means of saving her life: but as a last resource before operating, he determined to employ pepsine. He accordingly prescribed one gramme, to be divided into two doses, and taken every day in a spoonful of broth. At the very first dose the broth was retained, and from that moment the vomiting never returned. On the third day the lady ate some chicken, and then some beef-steak. The treatment was continued in the same manner for three weeks, and at the end of that time the cure was complete: the emaciation was replaced by *embonpoint*, the fever and the cough ceased with the vomiting, and at the end of the ninth month the lady was safely delivered.

Dr. Gros then relates six other cases in which the pepsine was employed with the same success, and he thinks himself warranted in concluding that pepsine undoubtedly produces good effects in the vomiting which attends pregnancy. He explains the results by supposing that, although in the first instance the vomiting is due only to the sympathy existing between the uterus and the stomach, yet subsequently the stomach itself becomes affected, as is proved by the fact that, in the beginning of pregnancy the vomiting occurs only in the morning or the evening; but in aggravated cases it supervenes after every meal, and all alimentary matters are rejected. In such cases, therefore, when the stomach has taken on a morbid habit, and exhibits an alteration of secretion, the pepsine appears to be really indicated; although in a merely sympathetic action between the uterus and stomach, it would be difficult to explain the efficacy of its action.

On the Inhalation of Chinic Ether in Intermittent Fevers.—(An abstract from the "Zeitsch. f. pract. Heilk.," by T. L. A. Greve, M. D.)

Prof. Groh, of Olmutz, has lately published an article in the "Zeitschrift f. pract. Heilk.," in which he gives the result of experiments made by him on the use of Chinic Ether in Intermittents. The remedy is obtained by the distillation of Chinate of Lime (one of the products obtained in the manufacture of Quinia from Cinchona), with Alcohol and Sulphuric Acid, and is described as a perfectly clear, colorless liquid, of a pleasant odor and very volatile, though somewhat less so than Sulphuric Ether.

As subjects for his experiments, Dr. Groh selected six cases, which had not been previously treated in any way, and one in which the Tr. Cinchona Comp. had been used without permanent benefit. The quantity of the agent used at one time was from a scruple to a half drachm; which was poured on a cloth, and from this inhaled by the patient with deep inspirations. The inhalation was generally resorted to at the commencement of the cold stage, but in some severe cases several such doses were given at short intervals previous to the expected paroxysm. If the Chinic Ether was inhaled in the apyrexia, no peculiar symptoms were observed, except that the pulse and respiration were somewhat accelerated; the patients inhaled it with pleasure, and it excited neither cough nor other unpleasant symptoms. One inhalation at the commencement of the cold stage produced immediately a peculiarly delightful sensation; in all cases, except one, the cold abated, and the whole attack passed off imperceptibly, or was greatly mitigated, and where the spleen was enlarged it diminished in size. A speedy and complete cure was effected in six cases; the seventh was only benefited, there not being a sufficient quantity of the remedy at hand. Subsequently Dr. Groh repeated his experiments on six other patients, with the same favorable result; from one to three inhalations were sufficient to effect a cure. These experiments, remarks Dr. Groh, seem to be favorable enough to encourage further investigation, to determine the most appropriate dose of the agent, and the best time to give it; also, its chemical relations; and if by the method indicated, we can always obtain a uniform preparation.

Finally, the same investigator tried inhalations of Sulphuric Ether, and also of a solution of Sulphate of Quinia in Ether, or in Hoffmann's Anodyne, (10 grs. to one ounce of fluid). The result of these experiments may be given in a few words: Sulphuric Ether had, in all cases, no other effect on the course of the disease than to make the hot stage more severe. Repeated inhalations of several drachms of the two solutions produced, gradually, moderation of the fever, and, in three mild cases, effected even a complete cure. But so much of the remedy had to be used, and in more severe cases its effects were so unobservable and slow, that the patients became dissatisfied and asked for more effectual treatment, when the experiments were discontinued.

Excoriated Nipples.—Dr. Pierce, of Cedar Falls, Iowa, writes to the Boston Med. Journal as follows:—

I have seen the stramonium ointment, as well as the whole list of astringent and stimulating preparations, used for the above named complaint, but no other preparation which I have seen used has been so universally followed by good results, as that made after the following prescription:—

℞.—Acid Tannic, gr. xx;
Glycerinæ, Alcohol, *aa* ℥ i. M.

The result of my experience with this preparation, has been such, that I am confident if women who are afflicted with this distressing complaint would make a prompt use of this mixture, they might, in almost every instance, avoid resorting to that "disagreeable alternative," the use of the shield.—*Ib.*

STYPTIC.—*Solid Perchloride of Iron.*—The perchloride of iron is manufactured in a solid form by Messrs. Hopkins & Williams, of New Cavendish street, in which state it is particularly manageable as a styptic. Another, and perhaps superior way of using it, is to apply, by means of a spun-glass brush, a small quantity of the thick brown fluid, into which the solid perchloride kept in a bottle always deliquesces. It is particularly useful in such cases as excision of the tonsils, bleeding from the deeper-seated gums, etc. No inflammatory action follows this drug.—*Braithwaite's Retrospect.*

Chloride of Sodium as an External Resolvent.—M. Ancelon affirms that chloride of sodium employed externally, whether in powder or incorporated with lard or linseed oil, forms a most admirable resolvent of indurated lymphatic glands. Frictions made with a pomade compound of it will induce an eruption resembling variola, which proves of great use in pulmonary phthisis and in chronic affections of the alimentary canal.—*L'Union Medicale.*

☞ [Absence from the city prevented our seeing the 'proof' of the Editorial form, in which occur several unpleasant typograpical errors. We hope they will be overlooked.]—PUBLISHER.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

ARTICLE I. — *Oblique Inguinal Hernia — Treatment by Seaton.* By Prof. Z. FREEMAN, M. D.

Inguinal hernia is met with so frequently in surgical practice, that any method recommended for its *radical cure* is immediately seized upon by the profession, for experiment, to be approved of, or disapproved, as it truly merits.

The proper use of Chase's and other firm-spring trusses has performed many cures of such cases; the principal object of the surgeon being to retain the hernial contents within the internal inguinal ring, and by pressure, force the external wall of the canal against the internal to such a degree as to induce constant irritation; thus obtaining a small amount of inflammation and accompanying deposition of plastic or adhesive lymph. If the hernia is retained within the internal ring, and is not at any time allowed to enter the canal, this passage will, in time, become obliterated, on account of its disuse (as any part of the organism, from long disuse, is inclined to assume the rudimentary form). Thus, by retaining the hernia, and inducing adhesions of the walls, we produce a radical cure.

Many trusses with soft pads, are used only for retaining purposes; others are illy adapted to their proper position, moving too readily with the sudden motions of the body, and thus allowing the gut to protrude; for if the hernia protrudes, even very seldom, it keeps the rings and canal patent, and thus prevents their closing. It takes months, and sometimes even years, to produce a cure with the truss alone in many cases, and many more are never cured by such means, especially where the rings are large and the hernia of long standing.

Prof. Wutzer, of Bonn, presented to the profession the operation called "Wutzer's operation for reducible inguinal hernia, and the instrument necessary for performing it." Mr. Charles Vaudain, of Jersey, and others, have reported cases treated by Wutzer's operation, and report favorably upon it. The operation consists in passing a well oiled cylinder into an invaginated portion of the scrotum, running it up into the inguinal canal, as far as the internal ring. A curved needle is then forced from near the internal end of the cylinder, through the integuments of the scrotum and abdomen; and a concave wooden cover-plate is screwed down upon the skin, compressing it against the cylinder. His object was to plug the abdominal canal, and induce adhesive inflammation of the invaginated portion of the scrotum. This may be all well enough, and if it produces a radical cure of the hernia, it has accomplished a good purpose. The operation is not always successful; proper adhesion and occlusion of the canal failing to occur. Taking this fact into consideration, I proposed, and succeeded in producing a radical cure by the following measures:—

M. K., aged 28; sanguine-bilious temperament; general health poor, having been afflicted with internal blind hemorrhoids, also constipation, for more than one year; was also a subject of reducible oblique inguinal hernia, of three years' duration. The gut protruded into the upper part of the scrotum, and was about the size of an adult fist. The inguinal rings and canal were large, so that one finger passed up readily, and two could, with a little pressure, be crowded in. There was no pain or tenderness about the part; he constantly wore a truss, and even that failed to retain the hernia. In stooping, or on any sudden movement of the body, the hernia was certain to return.

I placed the patient upon his back in a bed, elevated the hips by placing a hair pillow beneath the buttocks. I then reduced the hernia. Oiling my left fore-finger, I invaginated a portion of the scrotum, running it up the inguinal canal to the internal ring. I then took the varix needle, armed with large cotton wrapping-twine, doubled, and, guiding it along under the surface of my finger until near the end, I dipped it down through the posterior wall of the invagination, catching up the tissues in the neighborhood, and passing it above the end of the invaginated part out through the integument opposite the internal ring. I kept my finger pressed upon the internal ring, drew the scrotum out of the canal upon the cord I had passed. I then tied the cord snugly, but not tightly. I applied over the wound a linen dressing, saturated with a solution of Tinc. Aconite.

℞.—Tinc. Aconite, ʒ j.
Water, ℥ iij. M.

And upon this "Chase's wooden pad truss."

The truss could not be worn constantly. When the part became painful, the truss was removed a short distance from the spot, to be returned as soon as practicable. His hips were kept elevated, which favored the retention of the gut. His diet was farinaceous, and his bowels were not moved for six days; then only by enema. Once in three days, I would move the seaton, and when the inflammation seemed inclined to subside, I would rub a very small amount of our irritating plaster upon it, and draw it a little way in. There was a slight purulent discharge around the seaton. The inflammation was kept under control by the Tinc. Aconite, externally and internally, and in four weeks from the time of introducing the seaton, I removed it. At that time there was an indurated ridge along the track of the seaton, indicating a deposition of lymph, which filled the canal and caused adhesion of its walls; for the finger pressed against the external ring, showed hardening there, and its closure. He continued in that position one week longer, wearing the truss constantly, and then got out of bed and walked about the house, still wearing the truss. On the sixth week, the induration at the canal was less; still there was no inclination to hernial protrusion. He continued the use of the truss for some months about his regular business, which required almost constant stooping, with no return of the hernia, until one day, having removed the truss and stooping in lifting very heavily, he felt a slight pain in the region of the internal inguinal ring. Upon examining the part, he noticed a small tumor, as large as the end of the finger, at the seat of the pain. He immediately reduced it, and applied the truss, and since that time he has had no return of the difficulty, and considers himself *radically cured!!*

CINCINNATI, 278 *Sixth Street.*

ART. II.—*Intermittent and Remittent Fevers.* By A. J. BARR, M. D.

In this country, perhaps, more than in any other, we are called upon to treat patients laboring under the influence of *malarious* diseases, usually denominated by practitioners Intermittent and Remittent Fevers; and not unfrequently by some who are engaged in the practice of medicine along the Missouri bottoms, when in a protracted and serious form, *Typhus* and Typhoid.

Though more frequent than any other diseases in the lowlands of the West, very little is known definitely concerning the great cause from which they originate. And indeed the profession seems to regard it of so little importance, or of so much difficulty to ascertain, that they have seemingly agreed to let the matter rest, and satisfy the inquiring student with abstract names, and well turned phrases, for scientific facts.

Very many theories have been advanced, many essays written, and lectures delivered, in which the subject of "*malaria*" or "*miasma*," would seem to have been fully discussed; but, to what do they amount? In these various discussions, we doubt not but the truth has been frequently touched, but still the subject is enveloped in mystery; so much so at least that we at this enlightened period can do no more than call over the names and prate the theories, which were used centuries ago. But, because past investigations have proven, in their conclusions, to be unsatisfactory, are we to become discouraged and cease to investigate? Shall we, because our forefathers failed to prove certain facts, with our present advantage of medical lore, give up all research, and resort to vague terms and titles, as others have done to hide their own ignorance? Certainly not; for we have been differently educated; we have been reared under a republican government, and educated in her liberal institutions, and know that nothing of a scientific character can be attained except by close research and indefatigable perseverance.

Intermittent and Remittent Fever, as well as many other diseases akin by origin and undoubtedly the result of some poison existing in the atmosphere, are usually denominated by our medical authors, "Miasmatic Fever," "Malarious Fever," etc. Now let us see what we understand by the terms *miasma* and *malaria*. First, then, "malaria" is generally understood in its literal sense to mean *bad air*, and "miasma," *poison*. We sometimes endeavor to qualify these terms, and say *marsh miasma* or *marsh poison;* but this slight change does not in the least better our understanding in the matter, and unless we can definitely specify the elements which go to make up this *malaria* or marsh poison, the terms are just as indefinite as either of the first referred to. Heat and moisture, whether it be gaseous, fungous, or animalcular, is without doubt essential to the production of this *morbific material;* yet, on careful chemical analysis of the air of the most marshy districts, we discover nothing more than the ordinary amount of oxygen, nitrogen, ammonia, and carbonic acid gas—nitrogen comprising the principal part of its whole bulk. This being a mixture, and not a compound, some may think that in certain localities it would undergo a material change, by the mingling of noxious vapors, and thus communicate their diseased influence to persons residing in or near such localities; but owing to the preponderance of the above named elements, and the rapid diffusion of gases, no change is made in the constitution of the air, even in confined localities. Very many theories have indeed been advanced at various times respecting this. Some respectable authors regard sulphureted hydrogen as the cause; others, zymosis or fermentation. Dr. I. G. Jones says: "I believe it to be the presence of a specific poison, known under the name of malaria," etc.; but on page 52, vol. 1st, he seems to be a little more explicit on the subject. He remarks: "If, then, we suppose—and I have little doubt of the truth of the supposition—that intermittent fever is produced by animalculæ;" thus defining the very poison he regards as the cause. But we will not consume time recounting the various theories, for "their name is legion." We will, therefore, proceed at once with the subject, and present the theory which appears to us as being the most reasonable, and, from the investigation we have given it, as being the most nearly correct of any we have hitherto noticed. The theory may not be an original one, as others may have advanced the same; but if so, we have not noticed it.

All intelligent, observing medical men admit at once, that malarious diseases are far more frequent during the hot weather of summer and fall, and in such localities where vegetation is rank and moisture abundant. Some may object to this, but it is so generally admitted that the majority of respectable writers agree that heat, moisture, and the process of putrefaction produce the *materies morbi* which we are in search of, and the only question which seems to be the most difficult is, the form in which it exists, its mode of entering the system, and its action while there.

On examining the bubbles that float on the waters in these marshes, pools and swamps, where vegetable matter exists so abundantly, we find that they contain corburetted hydrogen, (C, H_2) and carbonic acid gas, (C, O_2). The former of these may be freely breathed without any apparent danger, while the latter is a deadly poison, and can not be respired without injury. These gases seem to arise from the decomposition of the elements in which they first existed—the carbonic acid from the oxydation of organic substances, either animal or vegetable, and the corburetted hydrogen, from the changing of some more complex substances originally existing in the vegetable tissue, such as sugar, starch, etc., (C_{12}, H_{14}, O_{14}), (C_{12}, H_{10}, O_{10}).

On passing this marsh gas through water, we discover that it leaves behind putrescible materials resembling a ferment, which establishes fermentation and carries it on under favorable circumstances, until it affects the whole mass, in which it is present. In the most fetid regions, the *atmosphere* is never found to vary from its original composition. This being the fact, we may inquire, how does it affect the system, in order to produce such results as we are called to witness every day. It certainly would be difficult to prove that it is done by inhalation of noxious gases, though we are inclined to believe that it has something to do in bringing about *malarious diseases*, but science fails to prove it; we must, therefore, search out an origin somewhere else.

Granting that the old idea of vegetable decomposition and putrefaction, which are carried on without the body, have their influence in bringing about this class of diseases, let us see if the same elements can not be found continuing the same process of decay already commenced, before entering the system. There are many circumstances favoring this idea, among which we may notice the extensive heat of the summer season, which interferes very much with the organs of digestion, blocking up the hepatic ducts, and obstructing the discharge of bile from the liver to the intestines. Thus deprived of the antiseptic influence of bile, the gases in the stomach and intestines seem to be greatly increased by the more rapid decomposition of the amylaceous and nitrogenized compounds. This difficulty may, however, be brought about by other causes, such as congestion of the liver, or some mechanical injuries, etc. Again: during the summer season, the principal diet is vegetables, which, when introduced into the system, go on in their process of decomposition, mingling with the putrefaction already set up in the intestines, which of itself must be regarded as a disturbing action in the animal economy; but when aided by vegetable matter already undergoing putrefaction, must certainly be looked upon as a more active agent in the production of diseases usually charged to *malaria.*

Let us now briefly examine the *blood*, in which we find originating nearly all the diseases which we are called upon to treat. That we may be more fully understood on this part of our subject, we will commence with this fluid in the portal veins, as the origin of the whole matter lies in the amylaceous and nitrogenous products which it bears from the digestive organs to the liver. Now suppose that during the passage of the portal blood from the stomach, etc., the free carbonic acid taken up should be in excess, so as to cause a delay in its passage; or let us suppose that from some external cause, the liver becomes torpid; in either case, we should have an obstruction in the circulation, and from this, a disturbed condition and quality of the portal fluids. Now, as is well known, the slightest disturbance of the elements of organic compound is attended with their decomposition and reduction to simpler compounds, on account of the lack of strong affinity between the various combining elements, and the tendency to unite in more stable, because simpler, forms.

In the portal blood we have the products of digestion and assimilation in their richest and most recent condition, and ready, on account of the large proportion of amylaceous and nitrogenous compounds contained in it, to be decomposed by the slightest disturbance. This blood is on its way to the liver, to be there separated into bile, which is carried by the bile-ducts, through proper channels, to the intestines again, and into nutrient venous blood, which is taken up by the hepatic veins, and conveyed into the general circulation. But the portal blood, becoming stopped or retarded in its progress by either mode above suggested, and being nitrogenized to the last degree, easily becomes disorganized. *Light corburetted hydrogen* is produced by the decomposition of the amylaceous compounds and *carbonic acid*, as well as *ammonia*, *urea*, etc., from that of the nitrogenous compounds. Thus we have, or may have, in the blood itself, the very gases that we have considered the *morbific* agent in the production of *malarious diseases.* If the *materies morbi* is powerful enough, as in congestive chills, the patient succumbs; but if, as in most cases, it is not, the reaction comes on, nature strives by a mighty effort, to throw off the *incubus*, calling to her aid the lungs, kidneys, skin, and by these means the patient is sometimes relieved, and so much of the poison carried out that it requires several hours for it to again accumulate and bring on another paroxysm; o rperhaps by proper medical treatment, it may have been driven out of the system entirely. By these means we may account for the periodicity with which these diseases are generally marked, and by which the patient may be slightly affected long after the *miasm* or *malarious* influence has been removed from the country.

Prof. R. S. Newton, in his new edition of Eclectic Practice, remarks, while treating upon this subject: "We can not believe that any one will venture to contend that fever ever did take place under a *proper performance* of the depurating function. Now suppose such obstruction or lesion shall be general, universal in the system, what else could or should be expected than such a reaction as constitutes fever? The glandular structures, too, are in a similar condition, and hence all the impurities of the *venous blood*, because of defective depuration, become mixed and blended with the *arterial*, and the morbidity excites every part, and fever is the result." Again, he says, after referring to the theory of heat and moisture combined being the cause of these fevers, and the apparent difficulty to account for fever of this character in regions far removed from malarious influences, etc.: "He exhausted his skin." Speaking of one who may have been exposed to excessive heat, "many internal organs sympathize with it, particularly the *liver* and mucous membranes of the bowels, and thus without moisture he may be seized with dysentery; but with the moisture he may have some form of fever; his skin is too feeble to contend with a greatly reduced electric condition of the atmosphere, constriction of it ensues, then comes a chill, and then a reaction which is denominated fever. As the obstruction is universal, the result is fever." We account for it in this way: the patient is exposed to excessive heat, which may or may not be associated with strong vegetative growth, and drinking of water which has undoubtedly undergone material change after being carried exposed to the excessive heat of those sandy deserts; and as a result of such exposure we have obstruction of the liver and a general deranged state of the whole portal circulation, would it not then be reasonable to conclude that they *must* depend upon some process set up *within the body?*

We will now, for the present, dismiss the subject, hoping that something has been said which may at least, if nothing more, induce some others, possessing higher qualifications and better advantages, to give it a thorough and impartial investigation. That there is something in the theory worthy of a careful chemical investigation, we are fully satisfied, and our conviction is, that it is nearly, if not entirely, true.

CRAB ORCHARD, *Ray Co., Mo., April* 4, 1860.

ART. III.—*Adhesive Plaster used as Extension and Counter-Extension in Fracture.* By T. FRAZIER RUMBOLD, M. D.

The following case of compound fracture of the femur, which occurred in my practice last summer, is transcribed principally for the purpose of giving to the profession my experience in the use of Adhesive Plaster as a means used in the place of the perineal band and laced shoe for extension and counter-extension.

This is a method somewhat new, but not original with me. It is superior to any I have ever used, seen, or read of. It does not interfere with the circulation in the least, nor does it cause such exceedingly troublesome and painful abrasions, as the old method is sure to do, notwithstanding the greatest care is used by the surgeon and nurse. It also removes some of the greatest objections in the application of the extension splints.

On the 4th of June, 1859, I was called, in haste, to attend the son of Lewis Kerr, aged 12 years. He was riding a mule, which had harness on, with chain tugs. While a hired man was handing him a jug of water, the animal jumped so as to throw the boy from his back, and as he fell to the ground one of his feet caught in a loop of the trace-chain. In this predicament the mule dragged him three quarters of a mile, along a "cattle-track," through under-brush, across a creek, and over a log bridge, where he was checked, the foot of the boy becoming disengaged "of itself." He was taken up insensible, and carried to a house near by, where the principal part of the mud and gravel was washed off of his head and body, and out of his mouth, nose, ears and eyes. Previous to this he bore no resemblance to a human being.

In the examination, I found the back of his head almost entirely denuded of hair, and quite a number of gashes on the scalp, which bled so profusely that at first I feared there might be fracture of the skull, but found none. His shoulders and back, from his waist up, were very much injured, being covered with gashes and long scratches, his clothes being torn entirely from his body. The right femur was fractured at the middle of the shaft, and about one inch below the trochanter major. There was a very large wound between the genital organs and the right thigh, about six inches long, and two inches deep. With this, the perineal band, for counter-extension, was going to greatly interfere; but, to make it as bearable as possible to the patient, broad strips of adhesive plaster were put on both thighs and across the perineum, thus securing a union or rather a meeting of the edges of the wound, and a better looking place for the band.

While attending to this and sundry other duties, I had a carpenter make a "fracture bed," of the following description. I give it here, because it in every respect the most convenient I have ever seen, to be constructed in an hour and a quarter. It was made after the "saw-horse" fashion, with strong ticking tacked across the top, and being so constructed that it could be stretched as tight as necessary. Where his hip rested, a piece of the ticking was so cut as to fall down, giving an opportunity to administer enemas, and apply the bed-pan for his evacuations. A similar piece was cut under his shoulders, to admit of dressing that part of his body; these were laced up when necessary. This arrangement took away the necessity of moving or lifting him for the above purposes, and formed a very convenient and cool bed, which was quite a desideratum in this case. •

After the patient was placed on this bed, the splints were adjusted, and the fracture placed in situ. The principal attention was given to his head and shoulders. I feared more the result of concussion of the brain, aggravated by the inflammation of his back, than that of the fracture. He lay in a comatose condition for eight days. The first three days, the pupil of his eyes were much contracted. Pulse 148 per minute.

As an anodyne, left Powd. Exts. of Aconite and Hyosciamus, *aa* gr. ss, to be administered every hour, or as required; as an anodyne wash for the bruises on his head and shoulders, the Tinc. of Arnica flw. o. j., and Tinc. of Ext. Aconite, ʒ j.; the body to be kept cool by applying soft water with a sponge; as a cathartic, Anti. Bil. Powd., ʒ j., with xv. grs. of Pot. Bitart.; directing that if it did not operate in four hours to give an injection of Elm mucilage q. s. to effect the object; as a diuretic, if required, Acetate of Pot. iij. grs., giving him all the cold water he would drink.

June 5th.—Found him in about the same condition; was been very uneasy the forepart of the night; fighting those around him, and sometimes imaginary persons and things; pulse 120 per minute, and somewhat corded; respiration not so hurried, as yesterday; his head, shoulders and leg much swollen. The cathartic operated well after the injection. Continued the treatment with but little variation. I was compelled to remove the counter-extension band on account of the wound on the perineum, and place it on the other side of the scrotum; kept in its place by a band passed around the left side, drawing it in that direction.

The case was carried on in this way for six days more, with little alteration as to medical treatment, or the adjustment of the splints or their appurtenances.

June 12th.—Called again, accompanied by Dr. J. D. Wood, who assisted me much in this case. The patient appeared to be quite rational, but had forgotten how he was hurt, or about being on the mule, and almost every circumstance that had transpired for the last eight weeks, yet could talk rationally about the pain in his head, leg and shoulders; gave directions how to attend to them, etc., presenting to me quite a phenomenon of the mind, which I would be much pleased to give in full, and may hereafter, under a proper head. He now complained of the pain occasioned by the peroneal band and the laced shoe, which forced the nurse to relax the extension. On the previous day, I saw in the *American Journal of Medical Science*, a statement that Adhesive Plaster had been used with success as means of extension and counter-extension in fracture of the femur. In this case, I determined to test the utility of it. Indeed, I was obliged to do so, as the case will show. I had along with me a sufficient quantity of the plaster, and applied it forthwith in the following manner:—

Two pieces of Adhesive Plaster were cut, two inches wide, and fourteen inches long; these were placed on each side of the leg, commencing about five inches above the knee, and adhering the whole length; the lower ends of these were well stitched to strong domestic; these made long enough to be tied under the sole of the foot, where it was attached to the screw of the long splint for extension; this gave freedom to the ankle, which was much swollen from the checked circulation, caused by the laced shoe. For the counter-extension, four pieces of plaster were cut, one and a half inches wide and fourteen inches long; one of these was placed on the under and inner side of the thigh, and brought up over the abdomen to the right side, opposite the region of the liver; another one was placed on the upper and inner side of the thigh, so that it crossed the last one, and was brought down over the glutei muscles and carried obliquely across the back to the same place as the last; the other two strips of plaster were placed on the outside of the thigh, about two inches apart; the upper ends of these four adhesive strips were all stitched together, so as to be attached to the long splint.

These strips were so put on that both fractures were between them; consequently no stress was put on the limb but what was absolutely necessary, being the most reliable means for extension and counter-extension, as well as the most convenient for the patient.

The lad was quite well pleased with the new arrangements; they were on his limb for six weeks, when they were all removed, one at a time, in such a manner that the extension was not in the least relaxed. When the union took place, the patient's leg was as long as the sound one, and still continues so, he having perfect use of the limb, which is a rare occurrence under the best of treatment, with the old method. This, I think, is attributable to the aid given by the use of Adhesive Plaster, for it is evident that the perineal band could not have been worn in this case; consequently a short and crooked limb would have been the result.

The same principle can be applied to fractures of any of the limbs. If used in warm weather, the firmer the plaster the better, as the heat of the body and that of the atmosphere will be apt to make them slip on the limb; if such be the case, the nurse must be directed to keep up the extension as much as is necessary, so that the fractured leg is as long as the sound one.

May, 1860.

Art. IV.—*Colchicum in Ague.* By C. E. Ashley, M. D.

It is about nine years since I first prescribed Colchicum as an antiperiodic. Since that time I have never had occasion to recur to Quinine, thus avoiding those frequent cases of visceral congestion which every observant physician must have noticed to result from the use as well as the abuse of that drug. My practice has been to cleanse the stomach and bowels by first using an emetic of powdered Ipecac., worked off with an infusion of Camomile flowers; then a dose of some warm purgative at bed-time.

R.—Podophyllin, gr. i.
Pulv. Ext. Colc., gr. v.
" Ipecac.
" Zinziberis ana, gr. ii.

Trit. pro pulvis hora decubitus sumendus.

Next morning begin with the Colchicum in some such combination as the following:—

℞.—Tr. Sem. Colchici, ℥ i.
Tr. Digitalis, ʒ ii.
Sp. Camphoræ, ʒ i.
Solut. Opii Muriatis, ʒ v.
Aqua ad. ℥ viij. M.

F. mist. cujus cap. cochl. unam magna ter die.

I recently had a case of man and wife, who had been suffering from tertian ague for about twelve months, so as to preclude the performance of their daily duties. During that period they had been attended by experienced physicians of the old school, who had "touched the gums" and plied in vain the largest doses of calomel, quinine, blue mass, arsenic, sulphate of zinc, capsicum, etc., to "break up," as they said, the ague; but no use, back it would come! until at last, emaciated and worn out, both physically and mentally, the stomach would reject the simplest articles of food. They remained with me in order to a complete supervision of everything in the shape of diet, clothing, temperature, etc. A plaster was immediately applied to the epigastric region, composed of Extract of Hyoscyamus, Powdered Camphor, and Burgundy Pitch. Medical treatment much the same as above related. Warm clothing, flannel next the skin, warm pediluvium at bed-time. Diet, crackers, arrow-root, baked rice puddings, eggs beaten up with a little brandy and water; for a drink, weak brandy and water, adding the least portion of salt.

The third day came, and with it a chill instead of a shake. In a fortnight, they both returned to their home, able to eat anything fit to be eaten, and since then have had no return of the enemy. Why did former treatment fail? I think, because the visceral congestions, which constantly attend the various forms of ague, had been disregarded. It is, then, by elimination of the materies morbi of ague that the cure is effected.

If any physician should feel inclined to try this plan of treatment, I should feel obliged by the communication of the results. It will probably be some little time before they get accustomed to it, but when it is once accomplished, they will find, amongst other satisfactory results, a very sensible diminution in the amount of their annual drug bill.

Winslow, Ill.

ART. V.—*Case of Purpura Hemorrhagica.* Reported by G. HAYS, M. D.

May 10.—Was called to see MARY S——, aged 11. Her appearance denotes general debility. A few days ago, having a partially decayed tooth, she, by gentle force, succeeded in extracting it. Hemorrhage ensued, which has continued slightly ever since.

Symptoms at present.—Spirits depressed; pulse feeble, but quickened; livid spot appearing first upon the lower extremities, then upon the trunk and upper extremities. These ecchymosed spots resemble marks left by the stroke of a whip or violent bruises. There is an increased oozing of blood from the tongue, insides of the cheeks, and also from the cavity left by the extraction of the tooth. There is also, at intervals of from four to six hours, vomiting of dark-colored blood.

Treatment.—Filled the cavity in the jaw with cotton, saturated with Tinc. Chloride of Iron; ordered cold bath with gentle friction, and the room to be thoroughly ventilated. Also:—

℞.—Aromt. Sulph. Acid, ʒ ss.
Aqua Fontana, ʒ jj.
Syrupus Simplex. ʒ jss. M.

Give tea spoonful every four hours.

May 11.—Patient better this morning. Hematemesis almost ceased; ecchymosed spots are of a darker color, and resemble extravasated coloring matter of the blood.

Continue treatment, with the addition of—

Vinum Rubrum, o. ss.
Cinchona cortex pulv. 3 ss.
Ferri Carbonas, 3 jjj. M.

Take a table spoonful, three times a day.

May 12.—Still improving. Continue treatment, with extion of Elixir of Vitriol.

May 15.—Ecchymosed spots growing less. Health improving. Discharged.

ART. VI.—*Hemorrhoids, or Piles.* By W. G. BRUCE, M. D.

By Hemorrhoids, or Piles, we understand a certain pathological condition, either of the fundament, the rectum, or both. It is a malady which, from my experience, I can safely pronounce with another author, as being of a dynamic character; the anal tumors being but a local manifestation of the disease.

Persons have suffered of piles during almost the whole of their earthly existences; however, I believe that a radical cure can be effected in *any* stage or development of piles. The idea which has obtained with some authors, that piles can only be cured when not hereditary, is as absurd as the idea common with *others*, that the disease is merely a *local* affection, requiring *only* treatment. Hemorrhoids alone can not be pronounced as a *fatal* disease, though it may be the occasion of hemorrhage from, or metastasis to, vital organs; either of which may result fatally. I believe that hemorrhoidal discharges not unfrequently have salutary influence in some chronic diseases; but I *do not* believe that the simple act of curing the hemorrhoidal disease, and thus suppressing the *discharge*, would have any other than the most beneficial influence upon any other chronic disease that may at the same time have existence; for when we have removed the hemorrhoidal disease, we have got rid of a *generating cause* of a large variety of chronic diseases.

Authors have distinguished several different forms of hemorrhoidol disease, but I am of the opinion that they all amount to one and the same thing. At any rate, these minute divisions and subdivisions are of but little consequence in a therapeutical point of view; hence I shall not entangle the reader's mind by leading him into the obscure paths of superfluous details.

Blind and *flowing* piles are to be regarded as the same *pathological* condition. True, they have separate, distinguishing names, yet the essential difference between the two is found to consist merely in the greater degree of congestion of the blood vessels of the one, than is found to consist in those of the other. All the nerves in the lumbo-sacral region are more or less involved in this disease, which may be always known by the patient's complaints of pain in the small of the back, loins, and through the pelvis, which may be violent at times, either *throbbing*, *tingling*, *drawing*, *lacerating*, or *stinging*, all of which are accompanied with a great deal of itching; rectum feels as if it were distended; throughout the entire region of the pelvis the patient experiences irregular, sharp, shooting pains, which frequently come on all of a sudden; the anus is sore, as from tenesmus, together with spasm of that organ; hemorrhoidal vessels much congested, and in a varicose condidition; perineum and adjacent parts are seats of intolerable itching; perspiration from these parts is very profuse and annoying to the patient.

When the tumors discharge, the blood pours away in a continuous stream, producing a sensation as if a quantity of warm water were being discharged from the rectum. The hemorrhage usually takes place after feces have been passed, which are very hard, or it *may* take place at regular intervals of every month, two months, three months, six months, or perhaps it may only occur once a year; but when hard fæces, or any other mechanical irritation is the *cause*, the discharge being merely the *effect*, it may recur at any and all times, without reference to periodicity. The discharge, as a general thing, relieves the suffering of the patient; but I have seen cases in which the hemorrhage was so profuse as to exhaust the patient so much that he could scarcely raise himself from the *privy-seat* after each discharge, and which were *never* a source of relief.

When hemorrhoidal disease is of a very violent form, the bloody discharges are very offensive. The color of the blood discharged is usually that of arterial blood; however, if it happens to remain for any length of time within the rectum it assumes a dark color, and becomes coagulated. I have observed in my practice, the fact that the tumors, after a few years, may cease to discharge *blood*, which is superseded by a mucopurulent discharge, which stains the patient's clothes, so that he is compelled to wear a bandage.

It is generally conceded that *males* are subject to hemorrhoidal disease to a greater extent than *females*,—that males are more apt to be attacked with it on account of their abuse of stimulating drinks, narcotics, and many other articles which have a tendency to impair the digestive apparatus, indulged in as a common thing by males, and very rarely by females. It has also been asserted that the menstrual discharges in females is a prophylactic against piles. Hemorrhoidal disease is most common in persons between the ages of thirty and forty. I believe with others, that this disease may be *hereditary;* yet, as I have heretofore intimated, I am not disposed to make this fact a "*bug-bear*" in the way of a radical cure of piles.

Causes.—I think that hemorrhoidal disease may exist in the system without ever manifesting itself locally, unless irritated into existence by the abuse of stimulating liquors, tea, coffee, condiments, the indiscriminate use of cathartics, despondency, unnatural emotions caused by erratic reading, excessive indulgence of the sexual passions, masturbation, undue exercise of the mental faculties. One author gives as an exciting cause of piles, "*relaxing* food and drinks;" but I am inclined to think this an erroneous idea, for I am certain that I have found the use of relaxing food, while treating this disease, to greatly facilitate its cure. The same author asserts, that "sedentary habits of life," as that of "literary men, artists, etc.," is an exciting cause of piles. This may be true, but in my practice I have found it just the reverse. The most of the cases I have treated, indeed, *all*, have been persons who *stand* a great deal, as sailors, clerks, etc. I have learned, since living here on the seaboard, that sailors are almost *universally* afflicted with piles.

Treatment.—Prof. Howe has well said, that the nature and treatment of piles are not generally understood. I find that the profession at large is comparatively ignorant of this disease and its treatment. How many poor victims to hemorrhoidal disease are there at the present day who have had their last hopes of obtaining relief crushed within them by their physicians—physicians, too, who profess to be, and have received the titles of, *scientific* men! These bigots remind us of the Pharisees of old, who were haughty, and thought themselves superior to everybody else; like them they deserve the reproving words of our Saviour: "Friend, go up higher." But it is not my purpose to point out, in this place, the defects of the "*Old Law*," only so far as I can do so by exhibiting "a more *excellent* ministry."

The treatment used by me in piles is mostly new; I find it superior to that recommended in any of the books; indeed, it is the *only* treatment from which I have ever derived satisfactory results in this disease.

In all the cases that I have had occasion to treat, here on *Martha's Vineyard*, I have commenced with eutrophics and tonics. In cases of piles, where my patients were much debilitated, I have, with most gratifying results, made use of the following:—

℞.—Tinctura Columbæ, f ʒ j.
Tinctura Iodini,
Extractum taroxaci fluidus, *aa* gtts. xl. M.

Dose, gtt. xv., three times a day. After persevering in the use of this till a decided impression is produced upon the system, I make use of the following:—

℞.—Podophyllum, grs. ijj.
Pulvis Sulph.,
Capsicum, *aa* grs. vij.
Nucis Vomicæ, grs. xv.
Ex. Taraxaci, qs. M.

Fiat Massæ in Pilulas x. Dose, one pill every night.

This pill has an admirable influence upon the bowels and the lumbo-sacral nerves; especially when the latter are in a paralyzed condition. It has also a specific action upon the disease under consideration. If the patient is tainted with syphilis, (constitutional), I add to the recipe, *Auri Chloridi et Sodii.*

As an external application to the tumors, I have used, with the greatest satisfaction, the following:—

℞.—Ung. Stramonii, ʒ jss.
Tanic Acid, grs. iv.
Nucis Vomicæ, grs. v.
Sulph. Morphæ, grs. ij. M.

And applied three times daily.

Where the tumors were large, and seemed to resist the above treatment, I, in the mean time, brought them down and removed them with the *ligature.* The Nitric Acid treatment I consider quite good, but I prefer that of the ligature.

With the above treatment, I have effected a radical cure in *seven* different cases of hemorrhoids, *five* of which were of long standing.

Martha's Vineyard, 1860.

"THE CINCINNATI LANCET AND OBSERVER."

Messrs. Editors:—The editors of this journal, in their June No., condescended to give me a notice, and I desire, through the *E. M. & C. Journal*, to make acknowledgment of the same. It says:—

"Physiological Incest."—We see that Dr. W. Byrd Powell, of this vicinity—somewhat noted for peculiar views of the

Eclectic stripe of quackery, and troubled with some morbid fancies that he is a physiologist—has succeeded in finding his way into the pages of some of our cotemporaries, occupying room that we think might have been quite as well filled otherwise; but then we admit the force of the proverb, 'de gustibus,' etc. Our Nashville friends, we see, were not so easily caught napping."

The *Lancet*, we think, has had ample opportunity to learn that I, for twenty years, wore all the Allopathic stripes of quackery, and their name is legion. And I think it more than probable that if my progenitors had been as physiologically incompatible as those of the editors of the *Lancet*, (and those of the other may have been similarly circumstanced, but not having seen him I can not testify, as I make it a rule to write about nothing of which I have no knowledge,) I would, no doubt, have been still wearing the stripes of Allopathic quackery.

As to the condition of my fancy in regard to my being a physiologist, I will not pretend to decide; and I am sure that the editors of the *Lancet* are too little acquainted with cerebral physiology to constitute them reliable authority; indeed, I have a strong suspicion that their quackery extends to every subject within the circumference of the profession. As to the character of my fancies in relation to my physiological notions, the public will be informed in due season, but at most I am only 'in the line of illustrious precedents.' Dr. Harvey entertained a fancy that he was a physiologist, and in the confidence of his fancy he announced the discovery of the true circulation of the blood, and just such barklings as the *Lancet* charged him with being afflicted with morbid fancies that he was a physiologist. And as I have announced the discovery of a much more occult and important truth than that of the circulation, is it reasonable to suppose that I should escape a similar treatment from a similar class of the profession? In Harvey's time, there were a few noble spirits who aided him in establishing his great discovery in the public mind. Fortunately for the medical profession and the human race, we have still noble spirits in our profession, but those of the *Lancet* are not among them, as will be seen presently.

The course of the *Lancet* has been seen in relation to me and my discovery, and for the purpose of contrast, I will present that of the New York *Scalpel*. When I informed Dr. Dixon of my discovery, he continued, like a wise man, as he is, silent till he, by observation, satisfied himself that the discovery I claimed to have made was true. He then noticed the discovery, and informed his readers of the *Scalpel* how he came to know it to be true, and concluded his notice of it in the following words:—"Dr. Powell presents a claim to the gratitude of the race, by the announcement of this great discovery, that will be acknowledged long after his memory only will be cherished as the discoverer of the most important truth ever announced in physiological science."

I entertain no doubt that my readers, without exception, believe it to be the duty of every medical gentleman to investigate every discovery that is announced as being within the sphere of his profession; that to do so is his duty to the public and to his profession; they demand it of him. Dr. Dixon, then, has discharged his duty to both the profession and the public, and this we hold to be the highest merit that can be accorded to any one. See *Scalpel*, of January, '59.

Have the editors of the *Lancet* done their duty? Have they examined the discovery I have announced, and fixed their seal upon it as being either true or false? The answer must be, they have not. And why have they not? I will venture to answer this question for them. The answer involves two causes for their delinquency. The first is, they are too bigoted to think it possible for any one to make a valuable discovery who has the temerity to think or investigate outside of the scholastic platform of his early preceptors. The second cause of their delinquency I hold to be, physiological incapacity to investigate the subject, and I now announce myself pledged to demonstrate the verity of this cause upon any occasion they may select for their submission to the demonstration. It may be inquired why I am so confident in this position. I answer, I know what physiologists have published in relation to the premises of my discovery; and I venture to assume it to be true, that these *Lancet* editors are not, in this relation, in advance of our most approved physiologists. This being conceded, I am sure of all the rest. Indeed, I am willing to hazard the venture without this concession.

Do not, dear readers, suspect me to be jesting in regard to the proposition I have made, for, in truth, I was never more in earnest. And if my physiological pretensions consist of "morbid fancies," then let me suffer the consequences; for there is no question or matter in physiological science, of the truth or demonstrability of which I am more convinced than I am of the truth of the discovery I have announced; and, therefore, in regard to its truth, I am ready to make any hazard.

I am, very respectfully,
W. BYRD POWELL, M. D.

PART SECOND.

SELECTIONS.

National Medical Convention for Revising the Pharmacopœia of the United States.

The fifth Decennial Convention for the above purpose met on Wednesday, May 2, at Willard's Hall, Washington City, at 10 o'clock, A. M.

Dr. George B. Wood, President of the Convention of 1850, was called to the chair, and Dr. John C. Riley, of Washington, appointed Secretary *pro tem.*

Dr. Thomas Miller, of Washington, moved that a Committee of five be appointed to nominate permanent officers of the Convention. This was carried; and Dr. Aiken, of Baltimore; Dr. E. R. Squibb, of New York; Dr. Bridges, of Philadelphia; Dr. Fuller, of Maine, and Dr. Thomas Miller, of Washington, were so appointed.

This Committee, having retired for consultation, returned and reported the following names:—

For President—Dr. George B. Wood, of Philadelphia.

For Vice Presidents—Dr. Jacob Bigelow, of Boston; Dr. Edward Warren, of North Carolina.

For Secretary—Dr. Thomas Miller, of Washington.

For Assistant Secretary—Dr. John C. Riley, of Washington.

All of which were accordingly elected by the Convention.

On motion, a Committee on Credentials was appointed, consisting of Wm. Procter, Jr., of Philadelphia; Dr. Thomas Miller, of Washington, and Dr. Cutter, of Massachusetts.

This Committee reported the following delegates as present at the Convention, viz:—

From the College of Physicians and Surgeons of Philadelphia—Dr. Geo. B. Wood and Dr. Robert Bridges.

From the New York State Medical Society—Dr. Caleb Green and Dr. E. R. Squibb.

From the New York Academy of Medicine—Dr. E. R. Squibb.

From the College of Pharmacy of the City of New York—John Meakim and Wm. Hegeman.

From the Philadelphia College of Pharmacy—Wm. Procter, Jr., A. B. Taylor, and Edward Parrish.

From the Maine Medical Association—Dr. A. J. Fuller and Dr. H. T. Cummings.

From the Connecticut State Medical Society—Dr. Gurdon W. Russell.

From the Massachusetts Medical Society—Dr. Jacob Bigelow and Dr. Ephraim Cutter.

From the Jefferson Medical College—Dr. Franklin Bache.

From the University of Pennsylvania—Dr. Joseph Carson.

From the Medical Society of the District of Columbia—Dr. Thos. Miller and Dr. Wm. G. Young.

From the National Medical College—Dr. John C. Riley and Dr. M. S. Lincoln.

From the University of Maryland—Dr. Wm. E. A. Aiken.

From the Maryland College of Pharmacy—Alp. P. Sharp.

From the United States Army—Dr. Lewis A. Edwards.

From the United States Navy—Dr. George Clymer.

The report of the Revising and Publishing Committee, appointed in 1850, was read, and referred to the Committee on Auditing Accounts of the Secretary and Assistant Secretary.

It was, on motion, resolved that such members of the two houses of Congress as are medical graduates be invited to attend the Convention and participate in its deliberations.

The delegates of several medical bodies represented in the Convention were then called on for contributions toward a revision of the National Pharmacopœia, when reports were handed in from the Massachusetts Medical Society, by Drs. Cutter and Bigelow; from the New York State Medical Society, by Dr. Squibb; from the New York Academy of Medicine, by the same; from the New York College of Pharmacy, by Wm. Hegeman, and from the Philadelphia College of Pharmacy, by Wm. Procter, Jr.

Dr. Parrish presented a report from the American Pharmaceutical Society, a body not incorporated and not represented in this Society; which was received.

These reports were referred to a Committee, with directions to report a plan for the revision and publication of the Pharmacopœia; the committee to consist of Dr. Franklin Bache, Dr. Edward Parrish, Alpheus P. Sharp, Dr. Thomas Miller, and George W. Russell of Connecticut.

The Convention then adjourned to Thursday, at 11 o'clock.

SECOND DAY.

At 11 o'clock, the chair was taken by Dr. Geo. B. Wood, of Philadelphia, the President of the Convention.

The minutes of the meeting of the preceding day were read by Dr. Thos. Miller, the Secretary.

Mr. Procter, from the Committee on Credentials, reported the presence, to-day, of the following gentlemen, additional to those present yesterday:—

From the Delaware State Medical Society—Dr. F. H. Askew.

From the Maryland College of Pharmacy—Mr. George W. Andrews.

From the Massachusetts College of Pharmacy—Messrs. Charles T. Carney and Robert R. Kent.

From the New York College of Pharmacy—Alex. Cushman.

Dr. Miller, from the Auditing Committee, stated that the report of the Revising and Publishing Committee appointed in 1850 had been examined, and found correct.

Dr. Bache, from the committee on a Plan for the Revision of the Pharmacopœia, brought in a report, comprising a series of resolutions, one of which was that there should be a Committee of nine (Dr. Wood to be one) to revise and publish the

Pharmacopœia; also, that three be a quorum, and that the place of meeting be in Philadelphia.

On motion of Dr. Miller, the report was considered, resolution by resolution; and it was ultimately passed.

Mr. Meakim, of New York, moved that a Committee be chosen from each of the delegations present, to nominate eight members of the Committee on Revision and Publication of the Pharmacopœia.

Dr. Miller moved to amend this, by making it a member from each State and Territory represented, viz: ten in all.

Dr. Bache thought it best that the choice should be made so that several of the Committee should be residents in or near Philadelphia, where the meetings of the Committee are to be held.

Dr. Askew moved that the President directly appoint the Revising and Publishing Committee.

Dr. Bache, with all confidence in the President, thought it would be best that the Committee be appointed by the States and Territories represented.

The President preferred to have nothing to do with this appointment, but that it be left altogether to the Convention.

The motion of Dr. Askew was put, and negatived; when

The motion of Dr. Miller recurring, it was put and carried unanimously.

On motion of Dr. Bache, a recess of ten minutes, to confer with the President on the subject of appointing the Nominating Committee was had; after which the meeting was resumed, and the Chair gave the names of the Committee.

Dr. Carson moved a resolution of thanks to the Messrs. Willard, for putting their hall at the service of the Convention during its sitting. Passed unanimously.

On motion of Dr. Bache, a Committee of five, to be appointed by the Chair, should be charged with the duty of reporting on a plan for organizing the next Convention of 1870.

The Committee, thus constituted, consisted of Drs. Bache, Squibb, Miller, Andrews, and Carson.

A recess of fifteen minutes was taken, to allow the two Committees to consult and report.

On coming again to order, Dr. Askew read the report of the Nominating Committee, which proposed for the Committee on

Revision and Publication of the Pharmacopœia the following gentlemen:—

Dr. Franklin Bache, of Philadelphia; Dr. E. R. Squibb, of New York; Mr. C. T. Carney, of Massachusetts; Dr. Geo. B. Wood, of Philadelphia; Dr. H. T. Cumming, of Maine; Mr. Wm. Procter, of Philadelphia; Mr. Ira Carson, of Philadelphia; Mr. Wm. S. Thompson, of Baltimore, and Mr. Ira B. Taylor, of Philadelphia.

The report was accepted, and its nominations confirmed.

The Committee to make arrangements for the Convention of 1870 reported, through its chairman, Dr. Bache, that the same rules as adopted in 1850 for the present Convention be taken, by simply changing dates.

The report was adopted.

Mr. Wm. Hegeman, of New York, moved to ask an expression of the opinion of the Convention in reference to the subject of a bill now before Congress to provide for the greater security of the medical profession, and the public, in the matter of importation of drugs and medicines.

The President thought that though the subject mentioned by the gentleman was one of high interest and importance to the general profession, yet it would be better for the Convention to confine its deliberations to the specific matter which had called them together.

Dr. Parrish thought that great praise was due to the New York College of Pharmacy for their action in reference to establishing standards for the strength and purity of drugs and medicines, but at the same time he deemed it not within the scope of the objects of the present Convention to interfere with the matter.

Mr. Carney, of Boston, thought the cause of pure drugs and medicines before Congress might be advanced by a simple expression of opinion by this body.

The President said that there would soon meet two bodies, the American Medical Association and the Pharmaceutical Association, for the consideration of whom the measure proposed would be altogether appropriate.

On motion of Dr. Carson, several sections of the bill before Congress were read.

Dr. Bache, whilst acknowledging the great importance of the matter, deemed it not germane to the objects of this Convention, and therefore moved to lay the subject on the table; which was accordingly done.

Mr. Meakim called the attention of the Convention to a proposition of the New York College of Pharmacy, which he embodied in a resolution, and moved—

That in the index of the Pharmacopœia, the syllables of both Latin and English names be so divided and accented that the index may also serve as a pronouncing vocabulary to the Materia Medica.

This subject was learnedly debated by Dr. Bache, Dr. Askew, and others; when

Dr. Askew moved to refer the subject to the Committee on Revision and Publication, to be acted on or not, according to its discretion.

On being put, this motion was lost by 9 yeas to 12 nays.

The resolution of Mr. Meakim was then put, and a new debate arose; when the resolution was carried by 12 yeas to 10 nays.

Mr. Meakim next called the notice of the Convention to its title of "The National Medical Convention," etc., etc., and moved to change to "The Pharmacopœia Convention."

Dr. Bache proposed merely to strike from the present name the word "Medical;" which was put to the vote, and carried unanimously.

So the Convention will be called "The National Convention for Revising," etc.

On motion of Mr. Procter, a contribution was then made by each of the members present to defray the expenses of the Convention.

The President took the opportunity to explain that the vote on the resolution of Mr. Meakim was merely a recommendation to the Committee on Revision and Publication, and not an instruction.

Mr. Procter spoke in favor of having a low-priced edition of the Pharmacopœia for more general distribution among pharmaceutists, which would do much to insure uniformity of preparation of medicines, etc.

The subject was discussed by the President, Dr. Bache, and Mr. Procter, when the matter seemed to be remitted to the discretion of the Committee on Revision, who were stated by the President to be always anxious to furnish an edition at the lowest price at which it could be done.

Dr. Parrish introduced the subject of uniformity of weights and measures by the medical profession, and by the apothecaries of the country. He advocated making the avoirdupois ounce the standard weight, as was advocated in England.

The President thought the Convention could not discuss this subject with profit in the short time allotted to it.

Mr. Meakim thought it best to begin now, if anything was to be done in the future.

Dr. Bache called up Mr. Taylor, of Philadelphia, who had written with much learning and effect on this subject.

Mr. Taylor then addressed the Convention in advocacy of abolishing the troy and avoirdupois scales now in use, and substitute the grain as the unit for all weights less than a pound avoirdupois—beyond that he would use pounds. He would also do away with the Roman symbols, and use the common Arabic figures. He thought this better than the plan now proposed in Great Britain.

Dr. Squibb read an extract from the united proceedings of the New York Academy of Medicine and the New York College of Pharmacy on this subject.

Dr. Parrish advocated the abolition of the present anomalous weights, and was in favor of the avoirdupois ounce and pound.

Mr. Procter also favored the avoirdupois measure as the only one to be used.

Dr. Bache thought it better, for the sake of uniformity, to wait the action of the British Commissioners on the subject of the consolidation of the London, Edinburgh, and Dublin Pharmacopœia. He was himself against changing the troy grain, and hoped the British Commissioners would not. He preferred the French system of *grammes* and *centigrammes*, doing away with *decigrammes;* but as there was little hope of this system being adopted in Great Britain, it would be best to wait and see what was done there before we act.

Mr. Meakim advocated the grain standard.

Dr. Parrish preferred the ounce.

Mr. Procter said that even in France now, in many of their best works on pharmacy, they reject the decimal division, and go back to the old ante-revolutionary measures.

The subject of weights and measures was then dropped.

After a vote of thanks to the President, the Secretary, and Assistant Secretaries, the Convention adjourned *sine die.*—*Jour. Mat. Med.*

Podophyllin and Leptandrin as a Substitute for Mercurials in Diseases of the Digestive Organs. By JARED P. KIRTLAND, M. D., of Cleveland, Ohio.

Habit, and occasionally a favorable result, too frequently establish the use of mercurials as a routine in disorders of the digestive system, embracing the liver, stomach, alimentary canal, and to some extent the whole glandular structure.

That those preparations are often the most certain and potent means for correcting such disorders, is not to be denied; and I most certainly shall not assume the province of the professional demagogue to decry their use. It should, however, be recollected that the best of remedies, injudiciously employed, will establish factitious disease, and that very many cases of hepatic and digestive derangements, organic and functional, can be traced, for their origin, to an indiscriminate or too long continued use of mercurials.

Such practice is liable to result in establishing an artificial action, which can only be sustained by a repetition of the same course of means. This artificial condition becomes as imperative in its demands for repetition as does the abnormal thirst for alcohol with the inebriate.

For the practitioner to be able to avoid such evils is a desideratum which I hope and believe to be attainable.

During the last two years I have, in a great measure, dispensed with the use of calomel and blue mass in diseases of the afore-named system, and have substituted therefor a combination of the resinoids of two indigenous plants, to-wit: podophyllum peltatum and leptandra virginica.

The former of these has long been known in popular practice as the May-apple or mandrake, and its medicinal virtues have, perhaps, been more correctly estimated by irregulars than the regular profession.

Standard authors who have noticed it, have copied, one from another, a tissue of errors in regard to its properties, till it is now generally considered to be a mere drastic cathartic, resembling jalap in its action. Experience has demonstrated to me that in moderate and suitable doses it is not drastic, but operates mildly, extensively, and equally on the whole alimentary canal; at the same it is as certain to reach the liver and bile-cyst as is an equivalent dose of calomel, without inducing the sickness and depression which often attend the use of mercurials under such circumstances.

The brief treatise on this vegetable, in Wood & Bache's Dispensatory (8th edition,) pages 556–8, contains some valuable truths, with at least an equal amount of error. The reputation of the podophyllum has been established by its abuse rather than judicious employment, a matter to which I shall again refer.

The latter, the leptandra virginica of modern botanists, was formerly known as the veronica virginica, and in domestic medicine as the colored physic root. I frequently prescribed it, forty years since, and more frequently observed its effects employed as a laxative and cathartic, as it then was extensively used by mothers and nurses in bowel complaints of children. It seemed in its impression to resemble somewhat ipecacuanha when administered in small and repeated doses; perhaps less nauseating and diaphoretic, and more laxative.

Both of these plants when prescribed in the form of either decoction or powder of the roots are objectionable, tending to offend the stomach: more from the stimulus of quantity than any medical quality. Modern chemistry and pharmacy have, however, obviated this objection, by furnishing their active principles in a concentrated form, which can be used in doses so small as not to offend the most sensitive stomach, and at the same time as powerful as the case requires.

My usual prescription for a laxative and aperient, as an equivalent for one or two grains of colomel or five grains of blue mass, is the following:—

℞.—Podophyllin.
Leptandrin, *aa* gr. x.

Mix thoroughly; divide into forty powders. Dose, one powder at bedtime; repeat as occasion may require.

Ale, coffee, or catawba wine forms a convenient and palatable vehicle.

The combination of these two articles was first suggested to me by my friend H. B. Wilcox, M. D., of La Porte county, Indiana.

It will not be attempted in this communication to specify all the various morbid conditions of the human system in which the above prescription may be employed, nor the modifications and combinations with other agents that may be resorted to by the skillful practitioner to meet individual cases. All this he will readily discern from his knowledge of general principles.

The term *deobstruent*, to designate a class of remedies, is obsolete, yet the above combination of active medicinal principles seems in practice to entitle it to a place under such a head. It is milder, and at the same time more certain to bring into a healthy and active operation every part of the glandular system than any means of my acquaintance. Hence its use is readily suggested in deficient or vitiated secretion of the liver, kidneys and uterus, with their associated morbid conditions.

A caution in regard to the dose of these agents, either single or combined, experience shows us to be requisite. On a recent occasion, an intelltgent physician was condemning the podophyllin as a harsh, drastic and irritating cathartic. The query was put to him, "In what dose do you administer it?" The reply was, "About two grains; but I do not trouble myself to weigh such articles."

Dr. Zimmerman's chapter "On False Experience in Medicine" is invaluable. It might be extensively illustrated with instances like the above.

One grain of opium is a safe narcotic for an adult requiring such an article; but eight grains would destroy the same individual.

One fourth of a grain of podophyllin, mixed with an equal amount of leptandrin, is a full dose for a laxative, but if multiplied by either four or eight, the remedy becomes drastic, harsh and irritating.

Then, again, the practice of portioning out by the eye these potent agents is unsafe. The eyes, fingers, and judgment of the most experienced may err; but his well-balanced scales, like figures, will not deceive.—*Cleveland Medical Gazette.*

Ipecacuanha in Dysentery. (From the Edinburgh Medical Journal.)

A new method of administering ipecacuanha has lately been proposed by a medical officer (of Her Majesty's Home Army,) at the Mauritius—I am sorry I have forgotten his name—and introduced into Madras, or rather recommended for adoption in India, by Dr. M. Rogers of this service. This method is based, apparently, upon the belief that ipecacuan has a special action upon the mucous membrane of the bowels, and aims to apply it to the whole mucous surface. Instead of beginning with 3 grs. in the slighter cases, or 20 grs. in the severer forms of the disease, Dr. ——, in Mauritius, recommended as large a dose as 30, 40, even 90 grs. at once, and repeated the dose after a certain number of hours. Dr. Rogers has hitherto, I think, not given more than 30 to 40 grs., but he found this quantity sufficient. I have tried the old remedy in this new form in one very severe case, (appended below,) giving as much as 30 grs., and I was much gratified with the perfectly successful result. Now, if this is the treatment of dysentery, if it be a successful treatment, what can still tempt men to give scruple on scruple of calomel? If dysentery were like cholera, an opprobrium to physic, there might be some reason for treating it empirically; but when we have a certain and safe cure for dysentery, under which the disease is checked as readily as, much more readily than, some other inflammations; what excuse is there for persisting in, or reverting to an old exploded system of "kill or cure" by mercurialization, so fraught with danger to the future health as well as to the present life itself? for well is it known to every experienced medical man in India, that those who recover after or in spite of the calomel treatment, are the unfortunates whom Dr. R. instances as being fit only for the invalids or a voyage to England; whose health is broken, whose digestion and teeth are gone.

Case VIII.—Private F. H., acute dysentery; admitted June 1st, 1859. Great number of stools, consisting chiefly, or wholly, of blood, mucus, and slime; no scybalæ; weakly, emaciated man of about forty years of age; has had disease three or four days, and has been taking *mercury from a native doctor* to cure it. Getting worse hourly, came to hospital; considerable pain, on pressure, along whole course of colon; griping and tenesmus; restless and very uneasy; says he is sure he is dying; has sores on the buttocks, where he has lain on his bed; can not eat anything; tongue almost black; pulse small and feeble. Treatment—"Ipecac. 30 grains immediately; a warm poultice over the whole abdomen, to be changed occasionally, and kept on all day; spoon diet." *Vesp.* Vomited once after taking the Ipecac., not severely; pulse not reduced; all the symptoms relieved; has had two or three stools only. Repeat Ipecac., 20 grains; continue poultice. 2d. Did not vomit with the second dose of Ipecac.; had better rest, and is improving in every way; no pain in the abdomen; no tenesmus; three stools with feculent matter, and small quantity of bloody slime; tongue cleaner; is weak, but not weaker than yesterday. Give the Ipecac., grs. 6, three or four times to-day; sago and arrowroot for meals in small quantity, with one ounce of port-wine, two or three times to-day. 3d. The weather is wet and chilly; patient seems to have been exposed to wet draught, and has a relapse, but not severe; five or six stools with some blood and slime. "Give again 20 grains of Ipecac., and give port-wine afterward." *Vesp.* Better; feels quite relieved; feels stronger. 4th. Continues to improve steadily; sores are healing; tongue of more natural appearance; pulse stronger; patient's hopes of life have revived. "Give the Ipecac., grs. 3, to-day, three or four times; the sago, etc., and wine as before; *avoid carefully the wet wind.*" 5th. Is rapidly getting well; no blood nor slime in stools, which are two in number, and almost natural in appearance; no pain nor other annoyance. Omit Ipecac.; give Sulphate of Iron and Quinine, of each 1 gr., thrice daily; continue wine, ℥2 twice daily. 7th. Is doing well; sores healed, and flesh and strength rapidly being regained; but there are three stools, and the last is loose, with an appearance of whitish undigested lumps in it; found patient had been eating curry with pieces of raw chillies and garlic. Ordered "more care in diet; Dover's powder grs. 5 h. s.; continue iron, quinine, and wine." 20th. Has steadily recovered health and strength; feels quite well; has one motion or two, as in health, in twenty-four hours; is discharged to join his regiment at another station.

Remarks.—This was as bad a case of dysentery as one could wish to see in any country; occurring in chilly wet weather after great heat, in a weakly man of worn constitution; and I confess, with all my faith in the Ipecacuan, I had little hope of saving the man's life. Yet the bad symptoms were speedily arrested, and the patient made a very good recovery — the more remarkable after the (unknown) quantity of mercury he had swallowed before applying for advice. A great point of interest is, that although on admission, there was considerable irritability of stomach, with nausea and anorexia, vomiting occurred only once after the exhibition of these large doses of Ipecacuan, and was not attended with depression or weakened pulse. I could give multitudes of cases similarly treated to the above, all with the like good result; and I have not one case of death to record. But further exemplification of the treatment recommended seems unnecessary, and would here be out of place. I have said nothing of the complications of "dysentery" with liver diseases, etc.; and of chronic dysentery and diarrhea. I did not propose to set forth the whole treatment of dysentery. I beg of all young men about to come to India or China, in the military or naval services, to read the works of "Ranald, Martin," and "Morehead." In conclusion, I would apologise to Dr. Rattray, if any remark of mine on these his cases and their treatment, should have caused him annoyance. I am not in any way acquainted with Dr. R., and have no possible object in drawing attention to his cases except that stated at the outset, viz., "to protest against such exploded, dangerous and useless practice in 'dysentery' and 'diarrhea;' and to earnestly advocate among young men preparing to come to India, a careful study *at home* of these diseases, and their proper management." I adjure Dr. R., and all those who still hold to the calomel system, and all who may have read "that a medical officer in charge of troops so very lately placed faith in, and used this treatment," to carefully study and diagnose each case that may come under their care, and, according to the history and symptoms of each, give a fair trial to the course I have here recommended. I am confident they will not be disappointed, if they will only observe the symptoms carefully, and make a timely use of the remedies proper in each case. After such a fair trial, let them go back, if they will, to calomel and mercurialization. I have the honor to be, Sir, your most obedient servant, James Donaldson, M. D., Madras Army.

PART THIRD.

CLINICAL REPORTS.

Newton's Clinical Institute.— Winter Session of 1859-'60. Services of Prof. R. S. Newton.

REPORTED BY JAS. A. HENSHALL, M. D.

Case 627.—Mr. S.; aged 38. *Chronic Gastritis.* This patient has for a long time been addicted to the use of alcoholic liquors, which is, beyond doubt, the cause of his present affliction. He is laboring under chronic inflammation of the stomach, with considerable spinal irritation. His tongue is covered with a grayish coat, pulse small and thread-like; urine scanty, and of a reddish-brown color; has a slight cough, but the respiratory organs are not materially affected; there is a slight crepitus detected in the right lung, which may depend upon the irritation of the stomach.

"How long have you been troubled with this affection?"

"Several months, sir; but I have not been so bad until within the last month."

"Do you have a constant pain in your stomach, or only after eating?"

"I have a pain nearly all the time, sir, but it is worse after eating."

"What is the character of this pain?"

"Sometimes it is a burning, gnawing pain, and at other times it will be a heavy, dull pain."

"How does your food agree with you?"

"Sometimes it agrees with me very well, and seems to relieve the pain, but again it will cause me to vomit, and increase the pain."

"How is your appetite?"

"I do not have much appetite, but am thirsty all the time."

In this case I will apply the irritating plaster over the præcordial region. And here let me remark, gentlemen, is one of the cases where the efficacy of this valuable remedial agent can be signally demonstrated. You will derive more benefit, possibly, from this one agent, in such cases, than from all other measures, with which you are familiar. I will also prescribe the following:—

℞.—Bismuthi Tris-nit, grs. xv.
Hydrastin, grs. x.
Syr. Rhei et Potas. Comp.
Vin. Oporto, *aa* ʒij. M.

Take a teaspoonful three times a day.

Dec. 28.—Improving in every respect; thinks he is about well. Last appearance.

CASE 628.—Dec. 14. B. Hopkinson; aged 9. *Chronic Diarrhea.* This little boy has been afflicted with diarrhea for several weeks; he is greatly emaciated, and has a peculiar sallow pallor of countenance. Abdomen distended, and liver very torpid, with general congestion of the portal circle; he does not complain of much pain in the bowels, and is much depressed in spirits. The evacuations from the bowels are very frequent, and of a very light color, being also rather copious; tongue slightly coated; pulse small and frequent. He complains of a pain in the right side, and chest, and has a constant cough, which often causes vomiting. Upon auscultation of the chest, the right lung is found to be considerably diseased, and the action of the heart very laborious; expectoration scanty. Has been under treatment of physicians since he was first attacked, with no benefit.

In this case I will give the following:—

℞.—Ferri. Carb. Precip. ʒj.
Sodæ Chlorid. ʒ ij.
Pulv. Hydras. Can. ʒ ss.
" Myricæ Cer. grs. xx.
Syr. Zingiberi, ʒ iv. M.

Take a teaspoonful four times a day.

Dec. 20.—Improving. Continue treatment.

Jan. 6.—Diarrhea has disappeared; has now only one evacuation from the bowels a day; cough is much better; feels slight nausea at stomach after eating. Will now put him upon

℞.—Ferri Carb. Precip. grs. x.
Sodæ Sup. Carb., ʒ ss.
Syr. Stillingiæ Comp.
" Zingiberi, *aa* ʒ ij. M.

Take a teaspoonful four times a day.

Feb. 3.—Discharged, cured.

Case 629.—Dec. 27. Margaret McConkey, aged 17. *Ulceration of Cornea, and Adhesion of Iris.* The cornea of the right eye is considerably ulcerated, and in consequence of previous inflammation, adhesion has taken place between the iris and cornea. She has been affected several years, but she says she never could see as well with the affected eye as with the other, as it was always rather weak. It has been worse within the past week, for which reason she now presents herself for treatment. The whole eye-ball is inflamed, and quite painful; the edges of the eye-lids are much reddened and indurated; there is almost entire opacity of the cornea.

"How does the light affect your eye, Miss McConkey?"

"A strong light causes great pain, sir, not only in my eye, but also creates a violent headache."

"Do you recollect how it first commenced?"

"At first it felt as if there was a grain of sand, or a hair in my eye; this was followed by a small pimple, which seemed to be over the sight, which gradually grew worse, until I could not see at all with that eye."

Ulceration of the cornea, or its conjunctional covering, is a very common consequence of inflammation. The ulcers are sometimes preceded by small superficial pustules, but more frequently appear without any such antecedent. They are usually small, round, and of a brownish color. They possess a very irritable surface, and consequently maintain the inflammatory symptoms. If large and deep, they leave on cicatrizing, a permanent white spot, named leucoma.

Opacity of the cornea varies in extent and depth. It always proceeds from organizable effusion into the natural texture of the part; but this may be induced in three ways: 1. Inflammation, leading to effusion in the superficial conjunctival covering of the cornea, called nebula. 2. Effusion of lymph into the substance of the cornea, with or without purulent matter, called albugo. 3. Cicatrization of an ulcer, called leucoma.

In this case I will advise the following treatment, for a few days:—

℞.—Pulv. Glycyrrh.
" Ulmi Fulv.
" Althæa *aa* ℥ ss.
Aquæ Distil., o ss. M.

Form a poultice, and apply to the eye.

℞.—Tinc. Gelsemini, ʒ j.
Quiniæ Sulph., grs. xx.
Syr. Simpl., ℥ ij. M.

Take a half teaspoonful three times a day.

Dec. 30.—About the same, but does not complain of so much pain. Will now prescribe as follows:—

℞.—Pulv. Hydrastis.
Morph. Sulph., *aa* grs. v.
Glycerinæ, ʒ j.
Aq. Rosæ, ℥ j. M.

Apply to the eye, several times a day.

℞.—Ung. Zinci. Anodyni, ℥ ij.
Glycerinæ, ʒ ij. M.

Apply to edges of eye-lids, night and morning.

℞.—Tinc. Gelsemini, ʒ ij.
Quiniæ Sulph., ʒ ss.

Take gtts. xxv, three times a day.

Apply the Irritating Plaster to the back of the neck.

Jan. 6.—Improving; inflammation subsiding, and can see much better; pain much relieved; continue treatment.

Jan. 17.—Improving in every respect; she says she has no doubt but what she will be cured.

Last appearance.

CASE 630.—Jan. 20. Wm. Steele; aged 14. *Epilepsy.* This patient has been subject to epileptic fits for four years. He does not know any cause which produced them; he says he never had a fall causing injury to the head, and does not remember being sick but once, when he had the bilious fever. He has been under medical treatment for several years, but no benefit resulted therefrom.

"William, how often do you have these fits?"

"I have one every week, and sometimes two or three a week."

"Do they come on at any particular time of the day?"

"Yes, sir, they nearly always come on about ten o'clock at night, but sometimes during the day."

"How long do the fits usually last?"

"About half an hour, sometimes not so long, and sometimes much longer."

Dr. Marshall Hall is of the opinion that epileptic seizures are produced by a compression made upon the jugular veins by the platysma, and other conical muscles. He states, as evidence in support of this opinion, that the paroxysm consists in a fixed condition of the head and eyes, dilated pupil, and deep flush.

In the treatment of this disease, it is always essential to remove the cause, if possible; and where the cause is unknown, the treatment must consequently be entirely empirical.

In this case I do not expect to produce much benefit, as I can not ascertain the cause, and moreover he has been under treatment so long, and with so little benefit, that I can not hope to do much toward promoting a cure. I will, however, use in this case an agent that I have lately been administering in similar cases with marked success; the agent to which I refer is the Tinc. Gelseminum. I will accordingly order the patient to take gtts. xx, three a day.

Jan. 24.—Has had but one fit since he was here, which occurred on the following night. It lasted only fifteen minutes, a shorter time than usual. This, gentlemen, is certainly some encouragement, a far better result than I anticipated. Continue treatment.

Feb. 24.—Had a fit last night, which lasted ten minutes, and he was entirely conscious during the paroxysm. Continue Tinc. Gelsemini, in gtts. xxv doses.

Mar. 13.—Had a very mild fit, or convulsion last night, lasting only a few minutes. The success of the Tinc. of Gelseminum in this case needs no comments. I think there is opened here a new field for this invaluable remedy, and I would like you to try it whenever an opportunity offers.

Continue treatment.

A New Cavity.—The Nashville Journal says: Prof. Retzius, of Stockholm, has announced the discovery of a new cavity, and named it the "*pre-peritoneal,*" which he says has hitherto escaped the observation of anatomists. It is circumscribed, and serves to facilitate the play, distention and contraction of the bladder. He discovered it in examining the disposition of the transverse muscles and their aponeuroses.—*St. Louis Med. and Surg. Jour.*

Mastich in Incontinence of Urine.—Dr. Debout strongly recommends the employment of the tears of gum mastich in the incontinence of urine of children, in the dose of one drachm night and morning. It may be made into bolus with syrup, or divided into pills. The cure is usually effected in eight days; but if the remedy is not successful in eight days, it is useless to continue it longer. It has proved successful in more than two thirds of the cases in which Dr. Debout has employed it.—*Ibid.*

PART FOURTH.

EDITORIAL.

DYSENTERY.

Dysentery is one of the oldest diseases with which we are acquainted. It is noticed by Hippocrates in various places, and Celsus mentions it under the name of tormina. Aretæus was the first to describe it accurately, and attributed it, with Hippocrates, to ulceration of the intestines. Galen was the first writer who gave a distinct account of its various forms. Subsequently, Greek, Latin and Arabian authors have written much upon the subject. Perhaps there is no other disease which has occupied more attention, been discussed more fully, or found more fatal in the hands of most practitioners. It often rages as an epidemic, and when such is the case, usually proves exceedingly obstinate and intractable. It might be supposed that a disease which has been so long known, and so closely studied by the ablest intellects in the medical profession, would have long since been thoroughly understood, and a reliable mode of treatment adopted; but such, we are grieved to say, has not been the case. The fatality of dysentery has ever been an odium upon the profession, and even yet, in the hands of many physicians, it is wholly unmanageable. It is only within a comparatively recent date, that anything like a rational and reliable course of treatment has been employed, and to the Eclectics is the honor of the discovery due. The old plan of medication, by bleeding, mercury, blisters, leeches, opiates, etc., is worse than madness, and it seems strange to us that it should have been so blindly followed, when the frightful mortality attending it was so palpable to every observer. Even at this day, calomel is relied upon as the "sheet anchor," notwithstanding the want of success attending its use. It is our opinion that many a case of simple dysentery, which would, in a few days, have been well, if let alone and diet and rest prescribed, has been aggravated by the use of this drug, and finally caused the death of the unfortunate patient.

It is not our intention here to detail the symptoms, or go into the pathology of dysentery; the subject is familiar to every practicing physician. As the season is approaching when the disease prevails to the greatest extent, we desire to present the treatment which is peculiarly Eclectic, and which may be relied upon as certain and safe.

In the more elaborate treatises upon dysentery, we find many *forms* described, depending on its *origin*, the *circumstances* under which it occurs, its *type*, its *character*, its *intensity* and *duration*. Thus, with regard to origin, it may be primary, consecutive, or symptomatic; as respects the circumstances, it may be sporadic, endemic or epidemic; with regard to type, remittent or continued, but most commonly the latter; with reference to character, it may be inflammatory, bilious-inflammatory, simple asthenic, bilious asthenic, adynamic or typhoid, malignant or putrid, scorbutic or complicated. These numerous varieties are mere arbitrary divisions, and it is quite unimportant, in a practical sense, to study these various shades of difference. It only serves to burden the mind with useless matter and produce confusion.

When called to a case of dysentery, the practitioner's first duty is, to inquire into the cause, and, if possible, remove it. The appearance of the *tongue* will indicate the class of remedies to be used. This organ is sometimes found covered with a whitish fur, the tip and edges being of a natural color. In this condition, there is too much acidity in the alimentary canal, and the neutralizing cordial in the following combination may be relied upon, and often works like magic:—

℞.—Syr. Rhei et Potassæ comp., ℥ ij.
" Prunii Virg.
Tinct. Opii Camphorat., *aa* ʒ j.
Geranin, grs. xx. M.

Sig. Take a half table spoonful, every three hours.

If the tongue be coated brown, indicating bilious derangement, and there is evidence of the accumulation of acrid bile and fæcal matter in the intestines, a cathartic should be first administered, composed of:—

℞.—Podophyllin, grs. ij.
Leptandrin, grs. viij.
Sanguinarin, grs. iv.
Ext. Hyosicyami, grs. ij.
" Taraxici, q. s.
M. ft. pill, no. viij.

Sig. One every two hours until free catharsis is induced. After the action of the cathartic, the former mixture should then be administered; to which, if necessary, the tincture of catechu may be added.

When the tongue is very red, accompanied with high fever, there is much irritation in the intestinal tract. In this case, the neutralizing cordial and sudorific tincture, equal parts with a little paregoric, should be freely given until copious diaphoresis is produced. Perspiration should be aided by the use of hot bricks wrapped in wet cloths. After the inflammatory symptoms subside, treat as before.

If there is any manifestation of periodicity, quinine should be given. In some cases, quinine invariably aggravates the disease; it is then not admissible. In nearly all cases, after the acute symptoms subside, it may be given with benefit, combined with the diaphoretic powder. Quinine is of especial use in malarial districts.

Where there is much soreness on pressure over the abdominal region, hops and stramonium leaves should be applied, or a poultice of hops and corn-meal, over which is spread thinly the extract of stramonium.

Tenesmus may be relieved by the cold sitz-bath, and by injecting into the rectum after each action, a small quantity of the mucilage of gum arabic, or slippery elm, to which is added a few drops of laudanum.

The diet should be regulated; no fruit or hard, indigestible matter permitted.

The treatment detailed above may be relied upon. It has never failed us, and we can safely recommend it to others.

ANALYSIS AND MEDICAL PROPERTIES OF DU PONT'S ARTESIAN WELL, LOUISVILLE, KY.

We have received a pamphlet containing a report, analysis and statement of the medical properties of the water of Du Pont's Artesian Well, situated in Louisville, Ky., prepared by Prof. J. Lawrence Smith, M. D. The water of this well is gaining considerable reputation for its curative virtues, and it may be of service to give the results of chemical investigations made by Dr. Smith, which are set forth in the above named report.

The method of constructing artesian wells is generally known. It is of very ancient date, the Chinese, justly celebrated for their deep scientific investigations and progress in the arts, having employed it one or two thousand years ago. During the reign of Louis the XIV, a well of this character was constructed in Arteseum, one of the provinces of France; hence the origin of the name applied to this class of wells.

The principal artesian wells of any reputation are those of Grenelle at Paris, Kissingen in Bavaria, Aire in Artois, Charleston well in S. C., Belcher's in St. Louis, and Lafayette's in Lafayette City, Ind. Of these, Belcher's Well, in St. Louis is the deepest, extending 2197 feet below the surface, and discharges 108,000 gallons of water in twenty-four hours. It does not, however, answer the end for which it was constructed. Du Pont's well is 2086 feet deep, and yields in twenty-four hours 330,000 gallons of water, which issues through a five-inch opening with such force that it rises in pipes one hundred and seventy feet above the surface. It is estimated that the force with which it comes up is equal to about ten horse power. The water has a constant temperature of 76½° Fahr., not varied by either the cold of winter or heat of summer. An analysis of the water is shown in the following extract:—

Nature of the Water.—The water is perfectly limpid, with a temperature, as already stated, of 76½°, which will be invariable all the year round. Its specific gravity is 1.0113. The solid contents left on evaporating one wine gallon to dryness, are 915¼ grains, furnishing on analysis:—

Chloride sodium,	621.5204
“ calcium,	65.7287
“ magnesium,	14.7757
“ potassium,	4.2216
“ aluminum,	1.2119
“ lithium,	0.1012
Sulphate soda,	72.2957
“ lime,	29.4342
“ magnesia,	77.3382
“ alumina,	1.8012
“ potash,	3.2248
Bicarbonate soda,	2.7264
“ lime,	5.9915
“ magnesia,	2.7558
“ iron,	0.3518
Phosphate soda,	1.5415
Iodide magnesium,	0.3547
Bromide magnesium,	0.4659
Silica,	0.8857
Organic matter,	0.7082
Loss in analysis,	8.1231
	915,5582

GASES IN ONE GALLON.

Sulphuretted hydrogen,	2.0050
Carbonic acid,	6.1720
Nitrogen,	1.3580

Comparison of the Water.—This water is very analagous in composition to the far-famed Kissingen water of Bavaria, and of Blue Lick in Kentucky.

Medical Properties of Du Pont's Artesian Water.—Before making the medical report on this water, I would state that mineral waters are, like other medicinal agents, only to be used under the judicious advice of intelligent physicians. Mineral waters, in the treatment of disease, take a place between medical and dietetic treatment, and become eminently useful in a variety of diseases that require, for the cure or alleviation, the continued use of some mild and gentle remedy, that may be taken in connection with the ordinary drink and food.

Perhaps there is nothing which puzzles the physician more than the peculiar virtues of many mineral waters. After the chemist has analyzed them, they are found to contain many well known constituents, some in very small quantities; and it seems impossible with our present knowledge, to reason fully as to what the medical nature of a mineral water will be from its chemical composition. The great value of the chemical analysis is to compare the composition of one water with another whose medical virtues are well established. It is upon this basis that the following general remarks are made, as to what we may expect from the Du Pont Artesian Well water.

Taken Internally.—The peculiar benefit arising from the use of saline waters to the mucous membrane of the stomach and digestive canal, is sufficiently well established by the daily use which both man and animal make of saline substances. If taken moderately they excite the appetite, and are looked upon as a mild and efficacious aid to digestion; in still larger doses they excite in a more marked manner the entire mucous lining of the intestinal canal, extending to the liver; and, taken into the circulation, their effects are felt in all secretive and excretive organs, as the kidneys, etc. From what we can arrive at by the composition of this water, in connection with the known virtues of similar mineral waters, this water is certainly calculated to meet as large a variety of those diseased, who resort to mineral waters for relief, as any other known spring; for the great portion of invalids using mineral waters, suffer from some derangement of the mucous membrane of the intestinal canal, or of the serous surface of the joints, embracing the various forms of dyspepsia and rheumatism. But we will proceed to specify the applicability of this water.

Dyspepsia.—This single term implies a variety of diseases by which the digestive organs are impaired, and, although no one treatment can apply to them all, this mineral water will meet as large a variety of them as any other. In cases of dyspepsia, whether caused by irritation or weakness, the continued and judicious use of sulphur saline water frequently effects a cure, as in that relaxed condition of the mucous membrane in the stomach and intestinal canal of elderly persons, where a very large amount of mucus is secreted without a proper portion of the other healthy secretions; also, where the stomach has been deranged by excess of either eating or drinking.

Costiveness—Is a very frequent accompaniment of the above disease, or it may arise from a torpid condition of the intestines alone, without any complication with the stomach; in either case good results may be expected from proper use of this water. But we must not be astonished if laxative effects are not produced by the water when the action of the skin is defective. The skin must first be brought into proper action by the bath or other proper medical treatment.

Derangements of the Liver.—When these do not arise from organic disease of the liver, but it has become affected sympathetically, or by its connection with the stomach and intestines, this water may be resorted to with good effect. In other diseases in which defective digestion or assimilation seems to be the prime cause, as in gravel, gout, etc., the use of this water may give relief.

Nervous Diseases,—Arising from derangement in the blood, or from local causes, as those violent headaches from indigestion or functional derangements of the stomach. The water removing the cause, removes the disagreeable nervous symptoms.

As regards the effects of the water on mucous membranes, besides that of the intestinal canal, we are not prepared to assert anything, although the distinguished German writer, on mineral waters, Dr. Vetter, states that the saline waters at Baden-Baden, when taken internally, exert a beneficial effect on chronic catarrh, leucorrhœa, etc.

Action on the Kidneys.—This water acts on the kidneys; in part, on account of its constituents, and in part, from the water alone.

Action on the Glandular System, Scrofula, Etc.—It is beyond all dispute that waters containing salt have a healthy action upon the glandular system, and when there is iodine present, however small the quantity may be, continued use of the water is sure to be felt by that system. This substance, iodine, was discovered in 1811, and very shortly afterward its medical virtues were ascertained, and it now ranks among the most important medical remedies. Within the last few weeks additional attention has been called to the subject by Dr. Boinet, in a communication made to the Academy of Medicine, in Paris. The doctor proposes the introduction of iodine into the daily food of persons laboring under any of the forms of this disease, such as worms, cretinism, enlarged glands, etc. Wherever iodine, he states, is abundantly diffused throughout the air, these disorders are rarely seen, and that the energy of the vital functions is in the direct ratio of the quantity of iodine existing in the animal economy. He proposes to iodize bread, cakes, syrups, etc., etc., simply by the introduction of such plants as naturally contain iodine, viz: all kinds of seaweeds and cruciferous plants, or else by using the water of iodized springs, or salts containing the same principle. Under these forms the quantity of iodine administered is so small as to communicate no peculiar taste to the edible substance. After ten years experience, during which Dr. Boinet has treated children specially selected by a physician of a "*Bureau de Bienfaisance*" for their scrofulous habit, he has come to the conclusion that the diet he proposes, if persevered in for some months, will not only cure scrofula but ulcerous habits, diseases of the skin, ophthalmia, caries of the bones, etc. The Academy of Medicine has referred Dr. Boinet's paper to a commission composed of Drs. Chatin and Trousseau. If there be any correctness in Dr. Boinet's statement, all mineral waters containing iodine will be invested with new interest.

Sufficient has been said to give a correct idea of the medicinal properties of the water of Du Pont's Artesian Well, and to direct those interested in the subject as to what may be expected from its internal use.

External Uses.—The external use of this water will be doubtless found of great benefit, and if the proprietors should determine to apply fully its medicinal properties, they will have to construct proper baths. In most instances, and for the greater portion of the year, the water can be used at the temperature it has on flowing from the well; but for many purposes they will have to elevate the temperature 20 or 30 degrees. Thus applied, sulphur saline waters are well known to be beneficial for a variety of diseases of the skin, scrofulous affections, and lymphatic tumors of every description, gout rheumatism, etc. In several of the diseases it would be proper to use the baths warm, as will be advised by those physicians who may direct the patients.

In addition to the above, it may be applied beneficially in many diseases of those mucous membranes that are accessible by washing, or by injection, as in certain diseases of the mucous membranes of the eye, etc.

NATIONAL MEDICAL CONVENTION FOR REVISING THE U. S. PHARMACOPŒIA.

In another part of this number may be found the proceedings of this important Convention, which convened in Washington on the 2nd of May, to take the necessary steps in revising our Pharmacopœia. We understand that the Publication Committee intend issuing a *cheap edition*, so that all may be enabled to obtain the work. The matter is of great importance, and we hope to see the utmost liberality manifested. We notice that the Committee of the Philadelphia College of Pharmacy, among many others, have recommended the preparation of the Extractum Podophylli Fluidum, Ext. Gerani. Fluid. Ol. Erigeronis, etc., remedies of great utility, which we have long used, and can vouch for their efficacy. When the next revision is made, we expect to see holding a prominent place, most of our indigenous plants, many of which are now totally ignored or only slightly noticed, together with the concentrated preparations, to whose discovery the profession is indebted to Eclectic labors. We are confident, however, that we will not receive credit for what we have done and are still doing. There is not liberality enough in the Allopathic branch of the profession, to do us justice. Narrow-minded and bigoted, they will eventually appropriate the labors of Eclectics, and claim all the glory. It is the fate of all inventors and discoverers to lose the reputation and profit of their superior talents and patient investigations. We like the principle—"give the devil his due." We also like *consistency*. Our brothers, who differ with us on medical subjects, arrogate to themselves the privilege of calling us *quacks*, and say we are not fit to be associated with, consulted, recognized as respectable, or as having any learning or medical knowledge; and yet they are beginning to avail themselves of the improvements *we* have made, and desire to steal all the honor. We know the influence that is driving them to it. It is public sentiment. The people are seeing the difference between the *slaughtering* practice of the old school, and the sanitary measures of the new, and the fear of starvation impels them to adopt our remedies. We are right, and they know it; and we have in this gradual change of opinions and practice, another illustration of the old adage, *magna est veritas, et prevalebit.*

A NEW COLLEGE.

We notice, through the Savannah (Ga.) *Journal of Medicine*, that a new Medical institution has been established at Griffin, under the name of the "Middle Georgia Medical College." This is the fourth medical college "*regularly conducted*" in that State. So say the editors of the Savannah Journal, two of whom are Professors in the Savannah Medical College. We were present at the opening of the latter institution, which commenced under fair auspices, and had fine prospects of ultimately becoming the first institution of the kind in the State. In a very short time, however (as doctors will quarrel), discord arose among the Faculty, the *Byrd* flew off and established the Oglethorpe College in the same city. The editors of the Savannah Journal completely ignore the existence of this College, intimating that it is *not* regularly conducted, and classing it in the same category with Thompson's School at Macon. It will thus be seen that there are six regularly chartered medical colleges in Georgia, no matter how irregularly two of them may be conducted. We are inclined to the opinion that there is much bitterness of feeling existing between the two opposing schools at Savannah. Each would willingly crush the other, were it possible. There is an "irrepressible conflict" between them—a very natural condition of things among rival doctors.

THE "LANCET AND OBSERVER" ALARMED BY PROF. POWELL.

The editors of the "*Lancet and Observer*," and the little "*News*" of this city, are very much alarmed because the "*Charleston Medical Journal and Review*," and other journals, have seen proper to publish an article on "Physiological Incest," from the able pen of Dr. Byrd Powell. These editors are trembling in their boots, and their knees are smiting each other miserably, on observing that some respectable Allopathic journals in the United States have the independence to disseminate to their numerous readers the great truths of Prof. Powell's grand discovery. The editors of these journals hang around the skirts of the profession, reminding us of little mangy fiste dogs, which whine, snap and snarl around a company of respectable mastiffs and New Foundlanders, bewailing their own insignificancy, because they can't come in among the big ones. Mentally incapable of making a discovery themselves, they are jealous of the respect paid to the superior talents of another. Accustomed to make the endless cycle of their old tread-wheel without moving an inch in advance, they wish to pull down any aspiring intellect which dares to deviate from the beaten track and think for itself. Embracing the fossilized opinions of an antiquated system, hedged round with the imperious *dicta* of a tyrannical National Association, composed of a set of croaking "old fogics" who guard the priceless jewel of "professional dignity," and hold the power of anathematizing such as dare think what *they* have not thought, or step upon ground which *they* have not surveyed; and hoping to gain favor and respectability by a sycophantic fawning to their mandates, these editors, clothed with the pompous importance of petty power, stand as scare-crow sentinels to warn their magnates of the approach of any one who is guilty of the heinous crime of being an *independent thinker*. Such is their motive for raising this great "hue and cry" against Dr. Powell, who is a regular graduate of what they please to call a *regular school*, and whose only sin is, that he claims the right to think for himself, and the privilege of giving whatever remedies he pleases in the practice of medicine. We have no doubt if he would renounce the doctrines he now holds, and return to the absurd system of salivating and bleeding, he would be gladly welcomed to the bosom of the *Lancet*, and the productions of his master mind would be eagerly sought after to enlighten the pages of said journal. But the *Lancet* has no such hope. It knows that Dr. Powell is a man of decision and strength of mind, and boldly advocates what he thinks is right. Having had the mire of Allopathy washed off him, he is not likely to return to it, and these editors know it. The Dr. has himself replied to the attack, and we will say no more upon this subject.

CLOSING EXERCISES OF THE SPRING SESSION, 1860, OF THE E. M. INSTITUTE.

The closing exercises of the Spring Session were held on Tuesday evening, May 22, 1860, in the Hall of the Institute.

From the report of the Session, made by Prof. R. S. NEWTON, it appeared that there had been 65 matriculants, and that 34 of that number had been adjudged worthy to receive the degree of Doctor of Medicine; also, that the honorary degree had been conferred on five practitioners of standing and merit.

The graduating class were arranged around the platform, and briefly addressed by W. F. HURLBUT, Esq., President of the Board of Trustees; after which he conferred the degree.

Prof. A. J. Howe then addressed the class on the duties and responsibilities they had assumed.

The exercises of the evening were interspersed and much enlivened by the spirit-stirring strains of Menter's Cornet Band.

Names of the Graduating Class.—J. C. Anderson, Mississippi; R. P. Anderson, Ohio; L. Barnes, Michigan; A. J. Barr, Missouri; T. C. Blakey, Missouri; R. L. Bolton, Missouri; J. J. Bolton, Missouri; I. N. Brown, Ohio; V. E. Cameron, Indiana; J. O. Carr, Kentucky; R. Curran, New York; A. V. Conklin, Ohio; D. H. Crosby, S. Carolina; A. J. Dawson, Texas; D. Day, Missouri; W. B. Edwards, Tennessee; J. Ewing, Indiana; M. Marion Fenner, Michigan; T. M. Gwin, S. Carolina; V. B. Gatewood, Virginia; E. Heath, Kentucky; I. N. Hollingsworth, Mississippi; J. C. Lampman, New York; G. Lyle, Ohio; J. B. McLaughlin, Illinois; J. B. Mitchell, Missouri; J. W. Musgrove, Alabama; J. P. Orr, Ohio; J. W. Pearcy, Georgia; W. H. Richardson, Illinois; J. L. Rhinehart, Illinois; J. W. Scally, Mississippi; A. L. Snyder, Ohio; G. C. Stapleton, Missouri.

Honorary Graduates.—S. T. Clark, Indiana; J. G. Fross, Michigan; J. J. Hall, Canada West; N. Hopkins, Canada West; W. W. S. Kelly, Missouri.

ECLECTIC MEDICAL INSTITUTE OF CINCINNATI.

This Institution was chartered in 1845. Whole number of Matriculants, 3,106; whole number of Graduates, 944.

It will be seen from the foregoing statement, that this is one of the most successful and prosperous Medical Colleges in the United States. The Eclectic College of Medicine having yielded up its charter, and the Faculties of the two Schools having become united, no rivalry now exists between them, and the prospects of the Eclectic Medical Institute are at present more flattering than they have ever been. The Faculty is composed of the strongest men from both schools. The respective members are perfect masters of their departments, and teach thoroughly and liberally not only what has been made known from past investigations, but *everything new* connected with their various branches.

Two sessions are held annually. The preliminary lectures of the next will begin on Monday, October 1st, 1860; the regular course on Monday, the 15th, and will continue sixteen weeks. The second session will commence immediately after the close of the first, and will continue fourteen weeks.

The School possesses every advantage claimed by other Colleges. Its students have equal privileges with others at the Commercial Hospital, beside the Clinical Lectures at Newton's Clinical Institute, where, twice a week, numerous cases of general and surgical practice are brought before the classes and treated upon genuine Eclectic principles.

Fees for the entire course, including every College expense except graduation, $85. Graduation fee, $25.

For further information, address

R. S. Newton, M. D.,
No. 90 Seventh St., Cin., O.

BOOK AND JOURNAL NOTICES.

A Treatise on the Venereal Disease and Spermatorrhea. By John Skelton, Member of the Royal College of Surgeons of England: London.

A copy of the above work has recently come to hand. We are glad to find that our friends in England are not idle in the cause of reform. They, too, have caught the inspiration, and are laboring to overthrow the absurd and dangerous system of Allopathy, and to establish the only rational mode of practice—the Eclectic. Dr. Skelton, the author, is the leader of the Eclectic School and Journal in London; and we judge from his productions, is a man of ability and force of character. He has to combat the same spirit of intolerance which the progressionist of this country meets. He comes to his task earnestly, with the consciousness that he is *right*, and with the firm conviction that *truth* will eventually prevail. The feeling in England against him may be estimated by the following extract from the author's preface:—"For many years, Professors of Medicine have wished to find a substitute for mercury, and yet have never thought of examining the vegetable kingdom for this great desideratum; it was reserved for the *Eclectics* (Medical Botanists) *of America* to do this, and experience has fully justified their labors. But in spite of the discoveries of our transatlantic brethren, British practitioners (such is the force of custom) are so deeply rooted in the use of mercury that if one among them with more courage than another, ventures to introduce a substitute, he is branded as a *quack* and empiric by the profession, who forget that the use of mercury, which he desires to supersede, is so glaring a piece of empiricism, that its *modus operandi* has never even been explained."

The author, after giving a history of the origin of venereal diseases, goes specially into the symptoms and treatment of syphilis, gonorrhea and spermatorrhea. The subjects are ably handled, and the treatment recommended excellent. His style is clear, smooth and ornate, and his views are set forth forcibly and comprehensively. We are much pleased with Dr. Skelton's Treatise, and hope he will continue his labors with untiring zeal, and at last triumph in the cause which he has espoused.

WOMAN: HER DISEASES AND THEIR TREATMENT. By JOHN KING, M. D., Prof. of Obstetrics and Diseases of Women and Children in the Eclectic Medical Institute, Cincinnati, etc. Cincinnati: Published by W. S. Merrell & Co. 1860.

A copy of the second edition of the above work has been handed us by the publishers. Dr. King's reputation as author of a work on Obstetrics, the "American Physician" and "Eclectic Dispensatory," is so well known and so firmly established, that the simple announcement of the fact that he has written a book on the diseases of women, is strong presumptive evidence that it is *good*, and will repay a careful perusal. The early demand for a second edition is proof of its intrinsic value. The diseases peculiar to females are discussed, and the author's treatment is given in his usual forcible, impressive style. The publishers have spared no pains in getting out the work in a neat and substantial manner. Orders for it must be addressed to W. S. Merrell & Co.

SAVANNAH JOURNAL OF MEDICINE. Editor, JURIAH HARRISS, M. D.; Associate Ed., R. D. ARNOLD, M. D.; Cor. Ed., J. S. WILSON, M. D. Savannah, Ga.

The above journal is an excellent bi-monthly of 72 pages. It is under the control of an able corps of editors, who take an independent stand, express their sentiments boldly, and have placed their periodical in a very respectable position among the medical journals of the South.

We see that Dr. J. S. Wilson, of Columbus, Ga., is now corresponding editor. The Dr. is the author of a book—"Woman's Home-Book of Health"—and has had considerable experience in editorial life. We have never seen his work, but find it favorably noticed. We doubt not his connection with the Journal will be an advantage to it. The May No. contains the Dr.'s salutatory, in which he announces himself "an advocate of progressive medicine," and says further:—"Guided by this spirit of progress, I may urge the adoption of some measures somewhat novel in their character, but which I, nevertheless, consider vitally important to the profession and to the community." We are glad to see that Dr. Wilson is progressive, and acknowledges the necessity of "reform" in medicine, although he pointedly repudiates the "idea of being regarded as a 'reformer.'" We take the liberty of suggesting to him that if he ventures to contend for any improvements in the mode of practicing physic, he will certainly be stigmatized with the epithet *reformer*, which has such an odious sound to him. "Progressive Medicine" is a dangerous subject to write about, especially when the National Medical Association is now in session. If he has any respect for his 'medical head,' he had better be cautious, or that Jesuitical body will soon have him decapitated and cast out; and if, Antæus-like, he should rise with renewed vigor, he must certainly wear the stripes and cropped hair of a *reformer*. Such is the fate of all who dare depart from the beaten track.

EDITORIAL ABSTRACTS AND CLIPPINGS.

On the Sulphate of Zinc and Sulphuric Acid as an Escharotic.—By Professor SIMPSON.—In a clinical lecture on carcinoma of the uterus and mamma and its treatment by caustics, we find the following very important remarks:—

"If you make use of the caustic made by saturating strong sulphuric acid with a quantity of sulphate of zinc, dried and powdered, you can manage by dipping an ordinary quill pen in this mixture, as if you were going to write with it, to lay it in a number of lines across the tumor, the number of lines corresponding to the size of the growth which you wish to destroy. Very speedily the super-sulphate of zinc kills the skin in the course of the lines which you have drawn; and if you will now scratch assiduously with the filled pen along these lines you will cut through the skin in a few seconds. Leave for a day the fissures filled with the caustic paste, and then every day or two by renewing the application of the scratching and caustic you can cut down to a greater depth. In making the first application I usually make a fissure of about a fourth or three-eighths of an inch in depth, and then destroy the tumor more deeply by successive applications. In this way five or six days may suffice for the removal of a good-sized tumor. Let me add, that in thus destroying and digging out, as it were, from its very base, a cancerous tumor of the mamma, or other external part—neither of the two caustics applied by the quill would suffice singly and individually. If you use the sulphuric acid alone you will find that the acid so chars and hardens the spot to which it is applied that you can not next day cut or scratch deeper through it with the pen; while the super-sulphate of zinc paste keeps the parts soft and pliable. Again, if you used sulphate of zinc alone you could not cut through the skin or penetrate deeply with it. For that purpose the aid of the sulphuric acid is required, and the relatively slighter pain attendant upon this than upon most other caustics is perhaps explicable by the fact that sulphuric acid acts almost instantaneously in producing its destructive effects upon living tissues. Usually the healthy skin at the edge of the sloughing-out mass is granulating, contracting, and partially cicatrizing before the dead tumor itself separates. Dress the exposed tissues or ulcer before and after the tumor is enucleated with black wash, chloride of zinc, sulphate of zinc, nitrate of silver, or any other appropriate surgical lotion."

CHLORODYNE: *Its History, Preparations, Properties, Therapeutic Effects, Doses, Etc.* *History.*—Chlorodyne was invented in the year 1848 by Dr. Browne, whilst officiating in his medical capacity during the prevalence of cholera and diarrhea amongst our troops in India, and was introduced to the notice of the faculty in this country by him as "combination of perchloric acid with a new alkaloid."

Preparation.—From Dr. Ogden's analysis it appears to be composed as follows:—Chloroform, six drams; tincture of capsicum, half a dram; oil of peppermint, three drops; muriate of morphia, eight grains; perchloric acid, twenty drops; Steele's hydrocyanic acid, twelve drops; tincture of Indian hemp, one dram; treacle, one dram. Dissolve the morphia in the perchloric acid; then add the tincture emp., capsicum, peppermint, and chloroform, and lastly the treacle and prussic acid.

Properties.—Chlorodyne is a volatile liquid, possessing a pungent smell and taste. It is soluble in alcohol, but insoluble in water; but may be conveniently administered in that liquid by suspending it in a little mucilage. The alkalies and alkaline salts decompose it. In color it is dark brown, and in weight equal to twice its bulk of water. It is anodyne, sedative, diaphoretic, astringent, antispasmodic, diuretic, etc. Unlike the preparation of opium it does not produce headache, giddiness, prostration of strength, nor stupor; but in large doses, and from a constipated state of the bowels, it is liable to produce nausea, which in the former case may be relieved by a small dose of sal volatile, and in the latter by recourse to aperients.

Therapeutic Effects.—The changes produced by this preparation on the system are: first, a gentle heat at the stomach, followed by a genial glow and total absence of pain; second, a calm and refreshing sleep; and third, an increase in the pulse, from a small, weak, thready, hurried, or bounding one, to a full, yielding, elastic, natural sort of one, decreasing in frequency of beats as well as resistance to a healthy condition."

Of its powers in the cure of consumption Dr. Stonehouse remarks:—"The cases (among others) in which I have employed it have been twelve cases of phthisis; eight of these patients have been examined by other medical men, and had been regarded as genuine cases of consumption, so that the nature of the disease does not rest upon my testimony alone. They were all well-marked cases; for I do not mention several others in an incipient stage. Two of the cases were in the last stage. The remaining eight were in the second stage, that of softening; in five of these hemoptysis was a prominent symptom. All these cases have done, or are doing, exceedingly well. Five of them have quite recovered; the others, with one exception, are in a fair way toward recovery."

Doses.—The dose of this preparation must be regulated according to the nature of the complaint. As an anodyne for febrile, inflammatory, or neuralgic affections, the dose is from ten to thirty drops; diaphoretic in cases of coughs, colds, etc., ten to twenty drops; sedative in consumption, etc., twenty to fifty drops; antispasmodic in gout, rheumatism, etc., twenty to forty drops; astringent in cholera, diarrhea, etc., fifty to one hundred drops. It is best administered on lump sugar, and given at intervals from every half hour to every four hours.—*London Chemist and Druggist.*

Hydrastin in Catarrhal Ophthalmia.—Dr. R. R. Stevenson, of Reedsville, Ind., communicates to us the following:—

"I have been using an ointment made of your 'hydrastin,' and mutton suet, in a great many cases of catarrhal ophthalmia, with great success—a disease that has been very prevalent in this State and Illinois for a great many years, caused, according to my view, by a humid atmosphere and heavy north-west winds in the autumn and spring. The following is my formula for preparing it:—

"℞.—Adeps ovillus, ℥ ss.
Hydrastina (alkaloid), gr. ij.
Venice turpentine, gtt. iv.
M. ft. ung. Apply to the eyelids night and morning.

"I have also succeeded in curing a great many cases of chronic inflammation of the conjunctiva with the above preparation. I have used the golden seal, with very happy effects, in gonorrhea, gleet, and other diseases of the urinary organs, depending on an increased action of the mucous membrane."—*Jour. Mat. Med.*

Preservation of Milk.—Of the different modes of preserving milk, the following is, M. Gaultier thinks, entitled to the preference. All liquids, he premises, dissolve, in variable proportions, the air to which they are exposed. Water, for example, contains a thirtieth of its volume, which, disengaged by heat, presents this remarkable feature, that it contains more oxygen than the atmosphere, and that the last portions hold more than 32 in 100. Milk forms no exceptions to this rule, and we can easily understand how this gas will accelerate change in this fluid.

The process for the preservation of milk, as recommended by M. Mabree, consists in heating it in a sand bath, or in vapor, until air ceases to be disengaged, and when introduced into appropriate vases or bottles, after its temperature has been reduced, the milk must still be deprived of air. The vases are made of galvanized sheet iron, to the necks of which are soldered leaden tubes, by which they communicate with a reservoir filled with milk, previously heated and cooled in the mode just prescribed. The vases filled, the terminal tubes are closed with strong pincers, so as to flatten them completely; they are then cut and soldered at the ends. Objections have been made to the materials used for holding the milk, on the ground of the lead communicating an unpleasant flavor to the liquid, and the opacity of the vases not allowing us to see whether it is in a fit state of preservation.

Another and simpler process consists in heating the milk in glass bottles, on the necks of which conical lead tubes are soldered; the mouths of these, so soon as the milk boils up to them, and has parted with its air, are closed. The milk, in cooling, descends somewhat, and allows of its surface being seen through the neck of the bottle.

Milk thus preserved may be kept without change for an indefinite period. Of its dietetic value in a great variety of circumstances, especially on board ship, in long voyages, or in camp, one can easily conceive without entering into details on the subject. It is not always possible to prevent a partial separation of the cream on the upper part of the liquid. To remedy this inconvenience, it will be necessary to shake well the bottle, and submit its contents anew to heat. Sometimes even globules of butter will be found in the neck of the bottle.

Zinc instead of Lead Paint.—In consideration of the deleterious influence of lead paint on those whose occupations are in making or applying it, and the possible injury to the public by its general use in dwelling houses, Dr. Hassall, of London, urges the substitution of zinc for lead paint.

He presents the following advantages of zinc as a material for paint:—

1. It preserves its color for a much longer period; and hence is more durable.
2. Its cost is somewhat less.
3. It does not give rise to colic, palsy, wasting of the arm, or any other of the often formidable diseases and symptoms which so often result from the employment of the lead paint.

The objections urged against its use are, that it possesses less body, and that it requires to be laid on in a different manner. These are, however, but minor objections; the first, which is not well founded, may be met by the application of an additional coat of the zinc paint; and the second, by a little practice on the part of the workman. Another objection of the master—the force of which the public will be able to appreciate—is its great durability, which renders a repetition of the painting necessary only at very long intervals.

The rapidity with which white-lead paint loses its color, especially in towns and cities, passing successively through several shades of yellow, brown, and black, most persons have had opportunities of observing; it has scarcely been laid on a week, in most cases, before the discoloration becomes perceptible. In closets and in ships, from the action of the bilge water, the discoloration is extreme, and it is this circumstance which has led to the very general use of zinc paint for vessels. The cause of the change of color of the lead paint is this: the sulphuretted hydrogen diffused through the air, especially of cities and in the vicinity of decomposing organic matter, unites with the lead of the paint, forming a black sulphuret of lead; indeed, lead is one of the delicate tests which chemists possess for sulphuretted hydrogen.

Most persons have also noticed the discoloration of the ceiling over gas lights, and have probably blamed the gas as the cause; but there is another cause which must share the blame. White lead is sometimes mixed with the lime used to wash the ceiling, a fact which, of course, fully explains its speedy discoloration. Were oxide of zinc resorted to in this case, no such result would ensue.

In a sanitary point of view, therefore—and it is this which I desire to advocate—the substitution of zinc for lead paint is greatly to be desired. It rests with the medical profession to enlighten the public on the subject, and thus insure the more general adoption of zinc as a paint.—*Druggist.*

An easily applied Treatment of Short-Sightedness.—(Translated by L. Elsberg, M. D., of N. Y.—When Foltz, Professor of Physiology, at Lyons, first published his article on the mechanical treatment of myopy in the *Gazette Medicale*, a year ago, we doubted the efficiency of his method, and did not deem it entitled to a place in the *Reporter's* Periscope. While we give it truly a "view around," over the whole medical world, it is our constant endeavor to make our Periscope reliable, as well as comprehensive, and drawing from the medical journals of every country, we are especially careful to exclude those reports of extraordinary and "miraculous" cases, cures, and inventions, those "hoaxes" which, to our regret, we have afterward seen going the round of our journals as "foreign *intelligence*" (!?) But while thus carefully selecting from the vast garners which the foreign journals present to us, we never lose sight of anything that might really prove of benefit to our profession; and though withholding the empty stalks, we as *Reporter* simply, leave to our readers the final trial and judgment of the value of the grain.

The following method we can now publish, however, with the recommendation resulting from entire or partial success in three or four cases that have come under our observation.

Short-sighted persons, in looking at distant objects, usually blink, i. e., bring the upper and under eyelids nearer together, covering a part of the cornea. A finger is applied to the outer commissure of the lids in this position, and they are drawn outward a little. By this procedure the cornea is flattened, and the axis of the eye is shortened. In consequence, the object looked at will appear surprisingly distinct in its outlines, often as much so, as if seen through suitable concave glasses. The pressure thus exerted through the lids on the eye must only be slight; when too great, the eye becomes presbyoptic, and vision dulled. Practice soon insures the exercise of the proper degree of pressure.

This simple, not painful, and entirely harmless proceeding, is to the short-sighted of the same service as the use of the monocle or single eye-glass. It enables him to see distant objects sharply defined, to read signs, names of streets, numbers of houses, to recognize actors on the stage, or persons in a large hall, etc. The vast advantage of this "easy method" over concave glasses consists (besides its being always at hand), in its having not only palliative, but also curative effects. It has certainly lessened short-sightedness in our own case. The cornea partially regains, through the slight but oft-repeated pressure on it, the natural retractility, lost through strong pressure from within; its convexity no longer increases, but rather diminishes, as also the antero-posterior axis of the eye. It is not to be overlooked, how very easy of execution this gymnastic eye-exercise is. It subjects the individual to so little inconvenience and interruption of occupation, that it is soon performed from habit, and almost unconsciously.—*Med. and Surg. Reporter.*—(*Druggist.*

For Bleaching Ivory.—The process for bleaching bone and ivory is as follows: —The bone or ivory is first to be rubbed with pounded pumice-stone and water, and then placed moist under a glass shade, which must be well luted to the stand at the bottom, and exposed to the heat of the sun. The sun's rays, without the glass shade, would be likely to produce fissures or cracks in the bone or ivory. The moist rubbing and exposure may be continued until the desired whiteness is attained. Beasley says a solution of sulphuric acid will bleach ivory.—(Correspondent)—*Chemist and Druggist.*

Appointments.—Prof. Grahame, of the Maryland College of Pharmacy, has resigned the chair of Pharmacy, and retires from pharmaceutical pursuits, to devote his attention to another profession.

Dr. Edward Warren, of Edenton, N. C., editor of the North Carolina *Journal of Medicine*, has been appointed to the chair of Materia Medica and Therapeutics in the University of Maryland, at Baltimore.

Prof. Austin Flint, Jr., has recently been appointed to the chair of Physiology and Microscopic Anatomy in the New Orleans School of Medicine. The former incumbent of this, Prof. Peniston, has been transferred to the chair of Anatomy, Prof. Beard resigning it and assuming the duties of the chair of the Principles of Surgery and Surgical Pathology, while Prof. Choppin takes a new professorship, to be called the chair of Clinical and Operative Surgery. Dr. Flint, previous to accepting this position, had resigned his professorship in the New York Medical College.—*Am. Med. Monthly.*

New Remedy for Burns.—M. Velpeau recommends the powdered subnitrate of bismuth to be sprinkled over the surface of burns. The part is to be kept to the open air, and the subnitrate changed when soaked and coagulated in small masses. It is not stated in what respect this powder differs from any other inert powder of purely protective nature.—*London Lancet.*

Arrest of Hemorrhage by Acupressure.—This new plan was put in practice in the Carlisle Infirmary, after an amputation of the leg, by Mr. Page, Mr. Simpson being present. It was most successful. Very little blood was lost, and there was less difficulty in controlling the vessels than is often experienced in this situation.—*London Lancet.*

MARRIED—April 3d, 1860, by Rev. J. G. Bonds, J. W. PRUITT, M. D., Graduate of the E. M. Institute, to Miss MARY J. RUSSELL; all of Russellville, Pope county, Ark.

— At Shawnee Mound, Ind., on 22d ult., by Rev. H. Smith, Dr. J. B. SCHULTZ, of Logansport, Ind., to Miss MOLLIE S. MEHARRY.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*False Sacculated-circumscribed-Aneurism Treated by Compression.* By Prof. Z. FREEMAN.

July 17.—Mr. B. F., aged 24, had been suffering for one week with severe pain in the upper part of the anterior and lateral portions of the left thigh, in the groin and hip, about the trochanter major, and as far back as the fissure of the buttocks. The pain, at first, seemed confined to the groin, but gradually extended back upon the hip and down the thigh, increasing in severity. He supposed that it was rheumatism, and had been treating it with liniments and fomentations, but to no advantage. He reports his case thus:—

About eight years ago, he had syphilis, accompanied with a small chancre on the glans penis, but no bubo; has never had bubo. He took the usual amount of mercury, as prescribed by the old school physician who attended him, and in due time became apparently rid of the disease. He has, at times, felt a slight pain in the groin, for three or four inches along the course of the femoral artery, but no swelling has accompanied it; and this was of short duration. While working in the field during harvest, and exerting himself severely while overheated, in pitching hay, he felt a sudden pain in the groin, which disabled him at the time, and in a few hours caused the pain above mentioned. Finding that the treatment suggested by his physician for rheumatism, was not relieving him, and that a tumor in the groin was rapidly developing, and becoming every day more painful, he sent for me.

I found him lying upon his bed, suffering severely with pain in the upper part of the thigh and the hip, which seemed to be of a neuralgic character. The pulse was small and chorded; feet and hands cold; tongue rather white, and slightly coated; headache; bowels constipated, and urine scanty and highly colored, passing frequently, with some pain. In the left groin, about two inches below Poupart's ligament, immediately over the femoral artery, was a pulsating tumor, about as large as a medium-sized lemon, which beat synchronously with the heart. It was painful upon pressure, and the skin was distended and reddened over it. The parts around it were painful also, and all the suffering in the hip and thigh seemed connected with this. By gradual pressure of my hands upon both sides of the tumor, I could slowly remove it, by forcing the blood out, but as soon as I relaxed my hand in the least degree, the pulsation would return strongly, striking forcibly against my hands, filling the tumor, and continuing its regular diastole. By auscultation I could distinctly hear the *bruit de soufflet*, (or bellows-blowing sound), which was four times stronger than the natural, thumping sound of the heart, a regular *whieugh! whieugh!! whieugh!!!* which indicated unmistakably that it was femoral aneurism. By compressing the artery upon the horizontal ramus of the pubes, the pulsations and bruit ceased, the tumor lessened in size, and nearly disappeared; but all would immediately return, when the compression was arrested. I examined for hernia, but there were none of the symptoms of inguinal or femoral hernia present; the inguinal ring was closed; none of psoas abscess, none of bubo, or any other form of tumefaction, excepting aneurism; coughing did not affect the tumor. I speak of this particularly because an old school physician who makes some pretension to being a surgeon, saw the case after it was cured, and the employer of my patient gave me as a reason for not paying my bill, that this physician told him not to pay it, as it could not have been an aneurism, but a bubo or some other tumor, or it could not have been cured by such means in so short a time;

but before I could enter suit and collect the amount due, the patient had left for parts unknown.

Treatment.—I immediately ordered the warm pediluvia, a dose of Comp. Powder of Jalap and Senna, an anodyne of—

℞.—Tinc. Gelseminum, 3 j.
Morphine, grs. ij.
Aqua Mentha Piperita, ʒ j. M.

Take a teaspoonful every hour until relieved.

Apply upon the tumor, as a moist dressing, a cloth saturated with—

℞.—Tinc. Aconite, ʒ ij.
Water, ʒ iv. M.

Diet, farinaceous and semi-fluid.

Found him next day—July 18—more comfortable; feet and hands warm, and less pain in the groin; but the size of the tumor, its pulsations and bruit, were the same as yesterday. I thought it a fit case to be treated by compression, and so proceeded.

I am well aware of the difficulties attending the successful cure of aneurism, either by compression or ligature. This subject has commanded the attention of our most eminent surgeons for years; and, even now, opinion is divided between the two methods. I am satisfied that there are many cases where judicious compression is the most appropriate, while in as many cases, the ligature becomes unavoidably necessary, and then not always successful. The surgeon may select his cases for compression, and so prove successful. It requires a longer period, I think, and greater care and skill, to secure, in all cases, a cure; but the result is, in general, more satisfactory, the patient obtaining a more ready use of the limb.

Mr. Anel, in 1710, tied the brachial artery, on the cardiac side, in close proximity to the aneurism; but this operation, so close to the sac, is not calculated to succeed, on account of the artery being diseased at that point, thus inducing suppuration or ulceration, instead of occlusion of the artery, by a deposition of plastic lymph.

John Hunter, in 1785, for popliteal aneurism, tied the femoral artery near the middle of the thigh, and thus secured, by the ligature some distance from the tumor, that which could not be accomplished by one in close proximity to it. Thus such deligation is called the Hunterian operation, and has been resorted to extensively by all of our prominent European and American surgeons, ever since, with various results.

Mr. Brasdor recommended that the ligature be applied on the distal side of the aneurism, where, from the position of the artery, it could not be applied on the cardiac side. Though successful at times, it does not meet with as much favor as Hunter's operation. There can not be much improvement made upon the Hunterian operation, and so the mind naturally turns to some other source of relief, and compression presents itself.

In ligaturing the femoral artery on the cardiac side of the tumor, we cut off the main communication of the blood to the parts below, and thus circulation and nutrition are affected. If the ligature is applied below the origin of the profunda femoris, we have communication through the perforating arteries; but if applied above, we have communication only through the smaller arteries, as the obturator, sciatic, a few branches of the gluteal and pudic arteries, thus inducing a coldness of the lower extremity; absence of circulation, endangering the limb by edema and threatened gangrene.

It is recommended by some surgeons to apply the ligature about the artery, not drawing it sufficiently tight to arrest the circulation, hoping, by this means, to gradually induce coagulation in aneurismal sacs, and also develop the anastamosing and communicating arteries, so that the circulation to the parts below may not be retarded, and the limb continue vigorous until the aneurism is cured. This does not always succeed, the artery closing too soon by inflammation and coagulation; or suppuration and ulceration of the artery being induced at the point of deligation.

Of course, it is better to have the use of the limb, even imperfectly, after the Hunterian operation, than to allow the aneurism to open, or to continue to annoy the patient by such constant pain and suffering, and interference with some important function by its pressure, as is usually the case. But, if compression can be made the means of a more satisfactory cure, retaining to the patient better use of the limb, and is a more successful method of treatment, and any information presented which may secure to us a superior method of its use and accompanying treatment, ensuring the most favorable results, must be properly appreciated.

False sacculated-circumscribed-aneurism may occur from atheramatous deposit in the internal coat of the artery, or a change in the structure inducing disease and weakness of the same, or ulceration or disintegration or some such cause whereby the internal coat is readily ruptured, and the middle coat weakened by change and disease of some of its fibers. Constitutional causes—as syphilis, scrofula, mercurials, etc.—may weaken the texture of those coats of the artery, and thus spontaneous aneurism develop itself, or some exciting cause may readily induce it, as lifting, sudden straining, jerking, or any sudden muscular effort. The pressure of the blood against the remaining fibers of the middle tunic and the external tunic of the artery dilate or distend those tunics to an extent corresponding with the aneurismal tumor. The unnatural pressure induces inflammation, and plastic lymph is deposited in the cellular tissue between the coats of the artery and outside of the external coat, binding the parts together, thus forming a strong barrier to the extension of the tumor. If the pressure is very great, it continues to dilate, and inflammation may be induced, and with it, suppuration, ulceration and opening of the sac, accompanied with, may be, fatal hemorrhage; or the parts may become firm, the tumor static, or nearly so, and, in time, spontaneous cure may result.

The opening into the aneurismal sac is generally small, corresponding with the ulcerated, softened, or ruptured spot, and soon becomes distinctly defined, round and covered by an epithelium apparently elongated, from that and the internal coat of the artery. The blood can readily enter, and can be easily pressed out, entering it with the peculiar bruit above described. If the aneurismal tumor is large, it may press upon some important part, as a vein, nerve, excretory duct, or other part, causing pain, arrest of circulation, or may interfere with some important function. Spontaneous cure sometimes occurs, and it is in following the natural process indicated by this, that directs the surgeon to attempt a cure by compression. The blood will sometimes deposit plastic or coagulable lymph upon the internal face of the aneurismal sac, one layer upon the other until the sac is filled with laminated fibrin; that which lies next the aperture is coagulated blood. This soon becomes condensed, and the blood no longer entering this diverticulum, passes on through the channel of the artery to the distal part. The most ready means to induce a deposit of lymph and coagulum in the sac, is by retarding the circulation in the artery at the point by compression; for if the circulation is not retarded, the blood rushes into the sac with such force that it disturbs the deposit and prevents the formation of fibrous laminæ.

To Mr. Bourdelot, at the close of the seventeenth century, belongs the honor of introducing the treatment of aneurism by compression, and after him, Genga, Hiester, Guattani, and others; but they used compression upon the sac. This method induced inflammation, and aggravated the disease. Pellatin and Dubois, in 1810, were the first to practice compression of the artery above the sac; but their pressure, and that of others, was so severe as to inflame and induce ulceration, and entirely arrest circulation in artery and tumor, thus preventing the formation of stratified fibrin. To the Dublin surgeons—first, Dr. Todd, 1826, and after, Dr. Bellingham, Hutton, and others, belong the merit of presenting a proper degree of compression above the sac, with its concomitant measures, and many other apparently indifferent, though important, circumstances, to secure a speedy and satisfactory relief in such cases; since which time both European and American surgeons have used compression above the sac extensively, with varied result, and it bids fair to supersede Hunter's operation, as proper experimentation and care develop its superior advantages to the limb of the patient.

With these facts in view, I applied Chase's truss for left inguinal hernia, having previously heated and bent the spring so as to compress the artery above the horizontal ramus of the pubis. Under the pad, I applied a cloth wet in a solution of Tinc. Aconite:—

℞.—Tinc. Aconite, ʒ ij.
Water, ℥ iv. M.

The pressure lessened the bruit, the size of the tumor and force of pulsations, but in a few hours the point compressed became exceedingly painful. I then removed the pad to a short distance above until that point became painful, and so shifted it upward and downward, as the patient could bear it, for four weeks, until he was well.

Report of Treatment, from Notes taken on the Case.

July 17.—First day of treatment of patient, as above stated. Directed warm pediluvia, cathartic, anodyne and the local application of solution of Tinc. Aconite.

18.—Patient much relieved, as above stated. Applied the stiff spring truss of Mr. Chase, as described above.

19.—Pain in the part pressed upon has been severe; also, pain along the course of the artery. I have had to move the truss up and down along the course of the artery, and sometimes remove it entirely for a short time. Tumor can be lessened in size, bruit lessened, and pulsation of the tumor lessened in volume. As previously noticed, all return upon removing the pressure.

20.—Much pain in the limb along the course of the artery; pain in the lumbar region of the vertebræ; limb slightly swollen; pulse slightly accelerated; some febrile symptoms; urine highly colored, passing frequently; gave ʒj. Fluid Ext. Buchu in a little water, three times per day; bathed the whole extent of the limb with the above solution of Tinc. Aconite.

21, 22, 23.—Urine not so highly colored, passing less frequently; less pain in the limb, although it continues to swell slowly; continued the pressure upon the artery with the truss, allowing the patient to displace and replace it, as the pain was severe or became relieved.

24.—Has taken cold from lying in the draught of air during a change of the weather. Can scarcely bear the truss on the artery for ten minutes at a time. Aneurism and adjacent parts painful, reddened and swollen; limb very painful along the course of the artery, down to the foot, and every pulsation causing a throbbing pain; limb much swollen and edematous, and the skin tense and shining; much inflammatory fever, and the patient considerably discouraged; urine highly colored and scanty; bowels constipated, and much pain in the head. Ordered Comp. Powder of Senna and Jalap. Applied a dressing of solution of—

℞.—Ext. Belladonna, ʒ ij.
Acetas plumbi, grs. xxxx.
Water, O iv,

To the whole extent of the limb, from the point of compression of the truss to the toes; elevated the foot and limb at nearly right angles with the body, and so kept it moist all day; kept up slight pressure with the padded truss, alternating' through the day, I kept the bruit and aneurismal pulsations lessened by half, through this and six succeeding days; gave internally the previously mentioned solution of Tinc. Gelseminum and Morphine, every hour or two or three, as needed to keep him, as much as possible, relieved from pain. He has suffered much these last six days, and, though I visited him three times a day and kept up the last mentioned treatment assiduously, yet the limb continues swollen and somewhat painful. He can bear the truss better, and the bruit and pulsations of the tumor are less, even when the truss is removed.

July 31.—Feels much better to-day; the bowels have been open quite freely (twice a day) during the last three days; limb not so much swollen; less pain; only a sensation of soreness along the track of the artery in the thigh; can bear the hard pad of the truss on the part with only two layers of moist muslin under it. Continued the treatment for four days.

Aug. 4.—Have been daily lessening the elevation of the limb, until it is now but slightly raised above the level of the body; the swelling in the limb has nearly disappeared. (I bandaged the limb on the 1st of August, but it caused considerable pain and I removed it and applied the previous dressing.) The tumor is lessened in size, but is much harder; the bruit is less, and pulsations are less in volume; can bear the truss constantly, day and night, and feels much better in general health. Continued the treatment, only using the Belladonna dressing to the thigh.

Aug. 7.—Patient doing very well, indeed; appetite good; bowels regular; urine nearly natural; in good spirits; slight pain at times in the tumor; bruit and pulsations scarcely noticeable; tumor still indurated, and the parts, closely approximate, are slightly swollen, and tender upon pressure. Applied the Irritating Plaster, four inches by five lengthwise, over the aneurism and artery, and continued the above treatment. He continues to improve daily in strength, and in the affected part.

Aug. 11.—Removed the plaster and truss; tumor much lessened in size, not much larger than a butter-nut, and somewhat flattened; neither pulsation nor bruit noticeable; the skin is pustulated from the plaster and discharging freely. Reapplied the truss in the original place and the plaster over the tumor. To-day he sat up in his bed. Removed the dressing of Belladonna.

12, 13, 14, 15.—Constantly improving; walked about the room and out doors, wearing the truss; is a little lame.

16.—Removed the truss for a short time; walked about the room; no bruit; no pulsation in the tumor; tumor considerably flattened; no pain; a very slight soreness; surface of skin over the tumor discharging freely; felt the femoral artery pulsating distinctly below the tumor above the crossing of the sartorius muscle; pulsation not as distinct as in the opposite thigh.

17.—Discharged, with directions to wear the truss for two weeks, and continue the plaster one week longer.

By compressing the artery above Poupart's ligament, or the horizontal ramus of the pubis, I retarded the circulation and induced a deposit of stratified fibrine in the sac, which gradually filled it, and thus produced the cure. By the Belladonna, I subdued the peculiar neuralgic and arterial pain, and by elevation of the limb, I retarded the circulation in the inflamed artery and tissues of the limb, assisting the blood to return through the adjacent inflamed vein. The pressure of the pad on the artery affected the vein also, which was unavoidable on account of their close proximity; and by the Irritating Plaster, I removed what remained of the chronic inflammation or disease, which might have originally caused the aneurismal development. Heard from him on the 10th of September; he was at work upon the farm, driving team, suffering scarcely any inconvenience from the difficulty, yet favoring himself as much as possible.

278 *Sixth Street, Cincinnati.*

ART. II.—*Spermatorrhea and Prostatic Catarrh.* By JOHN KING, M. D.

Prof. J. KING has just finished, ready for the press, a practical work on Masturbation, Spermatorrhea, Impotency, Sterility, and kindred diseases. He has kindly allowed us to extract the following remarks therefrom:—

"I have remarked in several places throughout this work, that an abnormal discharge of the prostatic liquor may be, and has been, frequently confounded with true spermatorrhea, and at this place I will explain my reasons for this opinion.

"Both the prostate gland and seminal vesicles secrete a fluid peculiar to themselves, but which is found mingled with the true semen when this is normally ejaculated. From inflammation, or from a condition of debility, these organs may secrete a superabundance of their peculiar fluids, the same as we find to be the case with other organs laboring under similar conditions; the nasal membrane, for instance, in catarrh, the bronchial membrane in bronchorrhea, the urethral membrane in gleet, the lining membrane of the bladder in catarrh of this organ, etc.; and the amount and character of the debility effected upon the general organism by these abnormal discharges appear to depend upon the more or less intimate relations of the organs secreting them with the vitality of the system, the quantity of the discharge, and the stamina of the constitution. The immediate and excessive debility attending chronic gonorrhea, chronic dysentery, gleet where the discharge is considerable, catarrh of the bladder, etc., is well known.

"The secretions from the prostate and from the seminal vesicles are constantly going on, though in very small quantity, and appear to be increased during venereal excitement. The secretion of semen is also constantly going on, but in a still more minute quantity; so much so, that after a vigorous man has copulated for several times in succession, a further continuance of the act, if erection can be maintained, will not be followed by an ejaculation of true semen; but should a discharge occur, it is apt to be viscid and bloody, containing no spermatic filaments, and some time must elapse before true testicular semen will be again discharged during coition. And this may be partly due to the fact that the prostration of the whole system, effected by the repeated copulations in succession, is as unfavorable to the secretion of semen as though it were induced by acute or other disease. The greater the degree of exhaustion or depression of the general organism, the more antagonistic is it to the formation of sperm; while, on the contrary, the healthier and stronger the animal man, the more copious and constant is its secretion.

"Sexual excesses produce a diseased or debilitated condition of the prostate, which may extend to the seminal ducts, the seminal vesicles, the deferent vessels, the testes, the bulbo-cavernosus, and the ischio-cavernosus muscles, etc., or which may occur simultaneously with disease or debility of one or more of these several parts.

"We may, therefore, have a *prostatic catarrh* or blenorrhea of the prostate only, an abnormal secretion resulting from excesses in venery; the prostatic fluid passing away more or less constantly, without sexual excitement or pleasure; or there may be connected with it an abnormal secretion or *a catarrh*, if I may so term it, of the seminal vesicles, the fluid discharged by them passing with or without excitement and pleasurable sensation; or these two diseased conditions may be connected with *spermatorrhea* or involuntary discharges of true testicular semen without sexual excitement or voluptuous sensation;* in either case producing an amount of debility and emaciation proportioned to the character, relations and condition of the part or parts affected, and the profuseness and constancy of the discharge; and the general symptoms experienced by the patient, in either of these instances, are so similar, and almost, if not quite, identical, that, without a very careful examination, they may readily be confounded and mistaken as symptoms of one and the same disease. In a practical view, however, this is unimportant, their treatment, with one exception, being essentially the same.

"How are we to discriminate these affections? The first two are attended with more or less constant and profuse moisture at the meatus urinarius of a viscid character, the discharge being sometimes felt passing in bulk along the urethra, and at other times passing imperceptibly in small quantity, being observed only when at the meatus. Under the microscope, we will observe in the discharged fluid a complete absence of spermatic filaments, though a few circular masses of carbonate of lime, from the prostate, crystals of oxalate of lime, or of the triple phosphates, or even moving granules of urate of ammonia, will frequently be present. In true spermatorrhea, either with or without these crystals, there will always be observed more or less perfect seminal filaments in the liquor passed.

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* When true semen passes involuntarily, during dreams or at other times, attended with pleasure, the difficulty is termed *pollution*.—K.

"I do not believe that in any case whatever, true testicular semen ever passes from the urethra without containing some of the filaments, either in a perfect or imperfect condition; and I base my belief upon the following facts, which have repeatedly occurred to me while treating this class of patients:—

"1. I have made frequent examinations of the constantly oozing viscid liquor of the same patient, as collected at various times, and have never been able to find any seminal filaments in it, except at those times when pollutions or spermatorrhea occurred.

"2. A similar examination of the fluid from the same person, when laboring under what is ordinarily termed "spermatorrhea," has, almost universally, with but few rare exceptions,* found the fluid to vary; sometimes containing more or less perfect filaments, and at other times being entirely free from them; the latter condition being more constantly present, while the former was only observed occasionally, at longer or shorter intervals, probably at such times as the newly-formed testicular semen deposited in the seminal vesicles would be abnormally expelled therefrom, and which would frequently happen after some kind of straining, as at the close of urinating or stooling; though it must be recollected that the viscid fluid, passed at the termination of these discharges, does not always contain seminal filaments.

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* In these exceptional cases, the filaments were very few in number, more or less imperfect, and quite inactive, and I am inclined to believe them to have been the remains of a former discharge of testicular semen, the whole of which had not been expelled from the urethra at the time of the discharge, on account of the feebleness of the ejaculating force.

Thus proving conclusively to my mind, that the constant discharge of viscid fluid was not true semen, because, when this was emitted, its essential filamentary peculiarity was always present in a more or less perfect condition; and likewise proving that both pollutions and spermatorrhoa may and do coexist with catarrh of the prostate and seminal vesicles; which complications are much more serious in their consequences, and much more difficult of cure than simple uncomplicated prostatic catarrh, which is often removed by merely a few *mild* applications of a solution of nitrate of silver, and which fact has undoubtedly led to the use of cauterization with the solid caustic in spermatorrhea, in which disease it rarely proves advantageous, except so far as benefits the prostatic catarrh, just referred to, with which the seminal loss is associated.

"The fact that I have never met with a case in which there was a constant oozing of testicular semen from the urethra, appears to accord with the view that this semen can only be passed at intervals, and in quantity and normality according to the condition of the patient. Thus, a person whose whole system has been impaired by masturbation or sexual excesses, can not be expected to have semen secreted as rapidly, nor in as perfect condition as one who, being healthy, has never yielded to such excesses; and it must be admitted that the great debility and prostration induced by excessive masturbation, is by no means favorable to the formation and secretion of an amount of sperm that can be constantly oozing away. Indeed, in those cases where masturbation has been carried to such an extent that, in order to produce an erection and emission accompanied with a sensation of voluptuousness, (which is always inferior to the enjoyment experienced when true semen is normally ejaculated,) the masturbator has been obliged to introduce some foreign body into the urethra, we will find that not unfrequently the resulting discharge will consist of the liquor from the seminal vesicles, prostate, Cowper's glands, etc., without a particle of testicular sperm to be detected therein.

"The seminal formation and secretion may be likened to the formation and secretion of the poison of the rattlesnake's fang. Fowl after fowl may be successively presented to him, which fall victims to his bite, until at last the poisonous matter ceases to be developed, or, at all events, ceases to be deposited in its reservoir, and his bite proves harmless, and continues so until a certain period of rest has enabled its secretory apparatus to form and deposit a fresh supply."

ART. III.—*A Case of Puerperal Convulsions, with Remarks.*

By Prof. C. T. HART, M. D.

About noon, on the 2d of July, I was called in consultation with Dr. O. E. Newton, to a case of puerperal convulsions. On my arrival, I found the patient quiet, and obtained from the Dr. the following history:—

The lady was a primipara, about 19 years of age. Throughout the whole course of utero-gestation her health had been remarkably good. She had been uniformly cheerful, and had suffered little inconvenience from the pregnant state. At the expiration of her full term, parturient pains came on naturally and regularly, were unusually slight, but sufficient for the gradual and steady expulsion of the fœtus; and about ten o'clock, after an easy and quick labor, the child was born. The placenta came away in a few minutes, attended with about the usual amount of hemorrhage, and everything seemed happily terminated. But at this juncture, without any premonition, the woman went into the most violent and distressing convulsions. The Dr. immediately administered powerful relaxants and anti-spasmodics; applied leeches to her temples, ice to the head, and revulsives to the extremities. After continuing for about an hour with terrific violence, the convulsions yielded to his remedies, and, as remarked, when I arrived the lady was calm, quiet and rational. I found her pulse 140 per minute, full and strong; her eyes congested, and head hot. We agreed to administer an enema, to continue the ice to her head, and the mixture of gelseminum, veratrum and lobelia tinctures, which she had been taking. At one o'clock, Dr. Newton left, and I remained to watch the case, sincerely hoping that she would have no recurrence of the spasms. But I was doomed to disappointment. The Dr. had been gone but a little time, before another intensely severe convulsion supervened. The sight was distressing. The poor woman's extremities were at first most violently convulsed, and then became as rigid and hard as steel; her jaws were set; tongue protruded, swelled and black; face puffed and livid; eyes congested, rolled upward and fixed; respiration laborious and stertorous, with foaming at the mouth. Her condition was truly deplorable; it must be seen to be fully appreciated.

After a time the paroxysm passed off, but her respiration continued labored, interrupted with piteous moans. With great difficulty, I succeeded in getting her to swallow tincture of gelseminum and lobelia, of each a small teaspoonful, with six drops of veratrum. I applied ligatures around her arms and legs, drawing them as tightly as possible, and ordered a large mustard plaster to the spinal column, its whole length, with cold water to the head. Before these measures were all carried out, another spasm came on. During the next intermission, I repeated the former dose, and completed my arrangements. The onset of the third paroxysm was as violent as the others, and I really thought our patient would not live through it. At this time, however, I noticed that her arms and legs were becoming quite purple and tumid, and, synchronously, her face was assuming a marble whiteness. Soon I had the satisfaction of observing that her breathing was becoming easy and natural, her limbs gradually relaxed, and in a little while she lay calm, quiet and composed. I continued the anti-spasmodic, and she had no other convulsion.

On the return of Dr. Newton, we gradually loosened the ligatures. Her pulse was still frequent and full, and we agreed to give chloroform, to prevent the recurrence of the spasms. I sat by her all night, keeping her slightly anæsthetized for sixteen hours; and, in addition, gave her each hour:—

℞.—Tinc. Gelsemini, gtts. x.
Tinc. Verat. Verid, gtts. ij.
Quiniæ Sulph. gr. i. M.

Under this treatment, her pulse soon came down to sixty beats per minute, and continued at that rate. In the morning, on suspending the chloroform, we found that all tendency to spasmodic action had passed off. Indeed, our patient was much improved in all particulars, with no fever or pain, and perfectly rational. She continues to improve rapidly up to this time—9th inst.— and we now regard her entirely out of danger.

Remarks.—There is always an increased excitability of the nervous system, inseparable from the parturient state, which predisposes to convulsions from otherwise slight causes. This condition appears to be similar to that induced by the administration of strychnia. It is a hightened excitability of the cord, so that impressions made upon the sentient extremities of nerves will produce vigorous reflex action. Hence the reason that the accumulation of fæces in the intestines will produce convulsions so readily in certain women, in the puerperal state, while, under other circumstances, it is attended with no dangerous result. Such being the general condition of the nervous system predisposing to spasms, the exciting causes may be conveniently arranged under two heads—Centric and Eccentric.

The first (centric) act upon the brain and spinal column in three ways—mechanically, emotionally, and through the circulation. Congestion of the brain, a clot of blood, or serous effusion within the cranium, or any disease of the meninges or skull, which produces mechanical counter-pressure upon the medulla oblongata, may induce convulsions in the excitable parturient condition. The same is true with regard to the emotions—grief, fear, disgust, etc. In unmarried females, the first sight of the new-born babe—the fruit of sin and evidence of shame—has been known to establish eclampsia. The unexpected appearance of a friend, a few days after labor, has occasioned the same result.

The condition of the circulation has an important bearing upon the development of convulsions. Anything that interferes with the action of the depurating organs, favors the accumulation of effete materials in the blood, which thus becomes a morbid excitant to the spinal cord. Pressure of the gravid uterus upon the encœlia and kidneys obstructs the action of these viscera, thus favoring the development of puerperal fits. The same is true with regard to the liver and lungs, deranging the function of the one, and preventing the due aeration of the blood by the other. A deficient supply of oxygen, no matter by what cause, is dangerous to the pregnant and lying-in woman. Asphyxia always induces convulsions.

Anæmia is another exciting cause. Animals killed by blood-letting die in convulsions. Frequent hemorrhage during gestation, or labor, renders the woman more liable to convulsions, and often constitutes the immediate exciting cause. An anæmic condition increases the excitability of the nervous system and favors congestions—two states dangerous to the lying-in woman.

The causes which I have noticed all act from within outward. The primary impression is made upon the nervous centers.

The second, or *eccentric*, causes, on the contrary, operate from without, inward. Impressions made upon the sentient extremities of nerves are conveyed to the centers, and by reflexion, the motor nerves are excited, and spasm is the result. When the spinal cord is very excitable—as after the administration of strychnia or in tetanus—a slight impression is capable of producing violent spasms. A tendency to the same condition is produced by parturition, and hence irritation of the uterus and vagina, accumulations in the bowels and bladder, often act as exciting eccentric causes of eclampsia. The mere presence of the child in the womb, or its passage through the vagina, may excite violent reflex action on the same principle. In an exceedingly irritable uterus, the sudden contraction, after the expulsion of its contents, may be stimulus enough to establish convulsions when there exists much excitability of the spinal cord. In the case under consideration, we could discover no centric cause, and as the bowels and bladder had been freely evacuated in the morning, as there was no hemorrhage, and as the convulsions did not come on until the placenta had been expelled, we concluded that the irritable nerves of the uterus had been lashed into fury by the sudden contraction of that organ, and by reflex action produced the violent spasms which we witnessed.

With this view of the case, the indications were—1. To overcome nervous irritability and spinal excitability. We gave gelseminum and lobelia, and applied counter-irritation to the spine. 2. To control excessive arterial action. We gave veratrum. 3. To prevent congestion of the brain and spinal cord. We ligated the extremities, and kept ice to the head. 4. To prevent a recurrence of the spasms. We administered chloroform.

Before closing I must make a remark in relation to the practice of blood-letting in this disease.

What is the object of bleeding? To relax the system and prevent congestion. Grant that it does so primarily, what is the secondary result? Let the advocates of the practice answer. All correct pathologists agree that anæmia *favors congestion, and is a fruitful cause of puerperal convulsions.* True. Yet I am advised to bleed freely, copiously; in other words, to make my patient *anæmic*, to cure the disease. What have I done? My therapeutics have established a pathological condition favorable to the development of eclampsia. Suppose a case, not hypothetical, but which frequently occurs. A woman is in convulsions, depending on irritation of the womb and vagina. I bleed! bleed!! The spasms cease; there is a calm, and I congratulate myself on my skill, forgetting that my patient is rendered anæmic. I have established a new cause. A little while, and the convulsions return with redoubled violence. I bleed. She dies! I avoid a Scylla, and am dashed to pieces on a Charybdis. Who is to blame? My authors, or my lack of common sense?

On the contrary, observe the advantage of the ligatures. Any one can soon demonstrate to himself, that by ligating the extremities he can speedily produce syncope; *i. e.*, too little blood in the brain. Here, then, we have a most important means by which we can draw off temporarily from the general circulation a large quantity of blood, whereby we prevent congestion of the brain and apoplexy, from which many women in puerperal convulsions die; and when danger is past, we return it to the general mass. Too much can not be said in favor of ligatures in this disease. The same is true with regard to chloroform in this as well as many other spasmodic affections. Its therapeutical application is not yet thoroughly understood. I have presented the foregoing report and thoughts hastily, hoping they may be of some advantage to young practitioners.

ART. IV.—*Lobelia Inflata.* By ALVA LEETCH SNYDER, M. D.

There are but few remedies, in my estimation, which have a wider range of application than the one of which I am about to write, although many persons in the profession have no more knowledge of it, than that it is used as an emetic.

I have been using the article continually for the last six years, and there has scarcely a week passed, that I have not seen the benefit of its application.

Its properties being such as to give it application in a variety of forms of disease, I think its action should be examined with the greatest care—for an agent, as active as this, which can scarcely do harm, with ordinary precaution, certainly deserves the careful study of every man who has a desire to relieve human suffering.

In speaking of the application of this article, I shall confine myself mainly to my own experience, which, I fancy, has not been very limited with regard to this most invaluable remedy.

I use it as an emetic, alone or combined with other agents, in protracted intermittents where there is a want of secretion and excretion, and I think there is no agent in the materia medica that will stimulate the liver, arouse an action in the skin, and unload the system of the morbid matter circulating in the blood as effectually as this article. It increases the action of all the emunctories, and thus carries off the virus that is depressing the vital forces. I use it as an emetic when there is spasm or a loaded condition of the stomach; when poisons have been swallowed, and in children who have taken a quantity of crude ingesta. It acts mildly in all of those cases, and its effect soon wears off, always leaving the patient in an excellent condition—*i. e.*, with a slightly increased action of the secretions and excretions.

I have used it with much benefit in asthma and in spasmodic cough. where there was an irritated condition of the air passages. I have found benefit from it combined with the tincture of opium. In spasm from worms—as they are mostly called "worm fits"—where these parasites are in the stomach, this is a most valuable remedy. It should be given frequently, in small doses, mixed in molasses; not sufficient to act as an emetic, but simply to nauseate, and should be followed by some good vermifuge. Having seen its beneficial action in so many cases of this kind, I can recommend it with confidence, and feel satisfied that every person who tries it in these cases will be satisfied with its action.

I have used it in all cases of croup, spasmodic, mucous and pseudo-membranous, and feel well assured there is no remedy equal to it in relieving these forms of disease. I prefer the acetous tincture, and, to have its local effect on the larynx, I give it in syrup; not permitting fluids to be taken for a time after its administration. Its best effect will be produced by giving it in small doses, frequently repeated; procuring, by this means, its local action more effectually, and finally its relaxing effect on the whole system by producing emesis.

I have used it as a topical agent in many cases, for the purpose of reducing inflammation, and relaxing parts affected with rigidity. It is an excellent remedy in chronic ophthalmia, combined with the acetate of lead. For this purpose, the acetous tincture should be diluted, and from three to five grains of the lead should be added to each ounce. With this the eyes should be bathed frequently.

In erysipelas, I think there is no agent equal to it. In the form of acetous tincture with form 3 iij. to ʒ i. of muriate of ammonia to the pint of tincture, I have used it as a wash with the best of results. I usually order it applied every time poultices of ulmus fulva are changed. It may be employed in the form of infusion, and applied constantly where the surface affected is not very extensive.

I have also relieved many cases of pruritus vulva and hives with the above mentioned mixture. In this case, the preparation should be warm when applied.

There is no agent that will take the place of the Lobelia Inflata in rigidity of the os uteri and external parts during parturition. I have used it in the form of fomentation over the vulva, in every case that has come under my care for the last five years, in which there was rigidity, and have never found it fail to relax the parts in from two to four hours; and I am satisfied it shortens labor very much.

I could not be persuaded to do without it in these cases, for

I know of no article in the materia medica which I could substitute for it.

There is another disease, in which there is probably no article equal to the Lobelia Inflata. I refer to tetanus. I have never used it but in one case of this disease. In that, however, it was prompt in giving relief; and, although the spasm returned at intervals during ten days, they were invariably relieved in a few minutes by this article in the form of acetous tincture, internally.

I often collect the herb for my acetous tincture, while it is in bloom, as I think it makes a pleasanter preparation for children, and fully as good for all other purposes.

ART. V.—*Stillingia and its Compounds in the Treatment of Chronic Diseases.* By Prof. R. S. NEWTON, M. D.

For the last ten years we have been studying with much care, the effects of various remedies in the treatment of the whole class of chronic diseases, the most, if not all, of which depend upon an impoverished or diseased condition of the blood, resulting from various causes; and we have come to the conclusion that in every case the fluids of the system, especially the blood, become the great sufferers, and that, whether this be the primary or secondary effect, a cure never was or never can be made without the use of such remedies or means as will act directly upon the secretions, and especially the blood.

Every medicine in the materia medica, except those which act mechanically upon the tissues, acts through, and produces its effect upon, the blood. This fact is so well understood by the medical profession at the present day, that no one ever denies this position, or even proposes to remove such diseases upon any other plan.

The whole class of scrofulous, skin and syphilitic diseases of the bones, and many others, depend upon a depraved condition of the blood, no matter what may have been the exciting cause which produced them.

This being the case, the question would naturally present itself to the mind of every thinking physician, whether or not disease, thus existing, could be removed or cured without using such remedies as would come in contact with every part or portion of the system by being blended with the blood.

Maintaining the above, we have, for the last ten years, based our practice upon this principle; and in every case of scrofula and syphilis, in all their different forms, and, in fact, the whole class of diseases of a chronic character, as well as many of the acute, have never found it necessary to rely upon any other plan of treatment.

We will further say, upon this point, that, in our opinion, the materia medica does not contain another agent, the medicinal action of which equals that of Stillingia for the cure of this class of diseases; and during this time we have, in almost every case, relied upon this agent, in combination with a similar class of medicines.

We have used Scovill's Compound Syrup of Sarsaparilla in large quantities, and find it, in every instance, to accomplish the desired object.

This is now one of the officinal medicines. The formula for its preparation is as follows:—

Take of	Sarsaparilla, (*Smilax Officinalis*),	8	ounces.
	Burdock Root, (*Lappa Major*),	8	"
	Yellow-Dock, (*Rumex Britanica*),	8	"
	Stillingia Root, (*Stillingia Sylvatica*),	6	"
	Turkey Pea, (*Corydalis Formosa*),	2	"
	False Bitter-Sweet, (*Celastrus Scandeur*),	4	"
	Dandelion Root, (*Taraxacum Dens Leoinis*),	3	"
	Juniper Berries, (*Juniperus Communis*),	3	"
	Prickly-Ash Berries, (*Aralia Spinosa*),	1	"
	Guiacum Wood, (*Guiacum Officinalis*),	2	"
	Bamboo Briar Root,	6	"

Coarsely bruise the above ingredients, and moisten them with alcohol. Let them stand two or three days; then put them in a steam displacement apparatus, and pass through vapor of three pints of strong alcohol. Continue the displacement with the steam of water, till the strength is exhausted; set aside the three pints of tincture which first passes, and evaporate the remaining decoctions to one quart; mix this with the tincture, add three quarts sugar-house syrup, and when cold add one and a half ounces of iodide potassium.

Hundreds of physicians will refuse to use even the best of medicines while the combination is unknown, who would willingly adopt its use when made acquainted with the formula for its preparation. Messrs. Scovill & Co.'s Compound is now as much a regular officinal preparation as any in the United States Dispensatory, and in this respect they occupy a different position from any other men who are preparing medicine for the public. A highly important point in their preparation of this Compound is, their extensive facilities in procuring the several articles during the seasons when they contain the greatest amount of medicinal powers; which is impossible for any one to do, unless, like them, they are engaged in manufacturing large quantities, and have in their employment individuals occupied in various parts of the United States and its Territories, in collecting, cleansing, properly preparing, and forwarding the various articles from their places of native growth. Beside, no physician, nor even a druggist would, for his own personal use, make the necessary outlay for procuring all the apparatus required for extracting the active properties of remedial roots, barks, etc., especially when he can purchase them at a cost much less than that for which he can manufacture them himself. For this reason their Compound can be sold at a price much cheaper to physicians and druggists than the lowest figure at which they can make it for themselves.

Their method of extracting the medicinal virtues of the several agents is in accordance with the views of our best chemists and pharmaceutists. They have, by repeated experiments, established the fact, that with all those medicinal roots containing resinous, active constituents, alcohol must be used to obtain them freed from starch, lignin, and other inert matters; water will not answer. Again, they have shown that many roots, barks, etc., which yield their active principles to water, have these principles dissipated or completely destroyed by being in contact with heated water for any considerable length of time. Hence the difficulty in procuring an efficient alterative when prepared by physicans or patients who are not provided with the proper apparatus and means for extracting active principles only; the efficacy of Sarsaparilla, Stillingia, etc., is greatly impaired by the long boiling to which it is generally subjected, while the medicinal virtues of other roots are lost on account of their insolubility in water. To corroborate this assertion, we would refer to the statements of J. Hancock, M. D., Philadelphia *Journal of Pharmacy*, vol. 1, page 295; of M. Beal, same journal, vol. xv, p. 675; of M. Souberain, same journal, vol. xvi, p. 38; of J. J. Husband, *American Journal of Pharmacy*, vol. xvi, p. 6, etc. Stillingia, although employed by the profession for only a few years, has already attained an unrivaled reputation as an alterative. It is a Southern plant, growing from Virginia to Florida, and was introduced to the profession by Thomas Young Simons, M. D.

Scovill's Compound is not only alterative, but has a diuretic and diaphoretic action.

We do not wish, by any means, to be understood as repudiating any or all other officinal preparations of the Stillingia, for we have spoken of the use and effect of others in detail in the *Eclectic Medical Journal* time and again, but now only wish to refer to Scovill's preparation—having become so familiar with its universal and successful results.

We will here add a few cases treated by Scovill's Compound, which have come to our notice, while seeking for information upon the subject of the action of Stillingia and its compounds.

Mr. J. D. Lehmer, of this city, gives us the following statement as the result of the use of this medicine in the case of his own son:—

While traveling in one of our steamboats, his son was exposed to a chilly condition of the atmosphere, which resulted in the extensive enlargement of the glands of the neck. Soon this condition assumed a chronic character, and was what might properly be called induced scrofula, for there is nothing of this kind in either member or side of the family.

Although his son was under the very best medical skill for the treatment of his neck, the glands continued to enlarge for one and a half years. Ulcers formed and suppuration began. The same medical gentlemen then, for one and a half years, did all in their power to arrest this condition and heal the ulcers, but finally acknowleged they could not, and declined to medicate any further, frankly acknowledging that they could not cure it.

After his son had become very much reduced and emaciated, Mr. Lehmer then began the use of Scovill's Blood and Liver Syrup, or Compound Syrup of Stillingia. In six months the neck was so nearly healed that he was then put to school; and at the present time he is well and able to attend to all the studies required.

Mr. Lehmer is one of our old merchants, that stands high in the community—one that has no wish to reflect in any way upon the want of success in treating this or any other form of disease; yet he is frank and free to say, that after three years constant attention to his son, his physicians failed to cure him, and abandoned the case. Then, in a few months, and with a few bottles of Scovill's Blood and Liver Syrup, he himself cured his son.

From this it will be seen that the preparation of Stillingia, in even small quantities, will cure when physicians fail.

Mr. James H. Whitaker, Amelia, Clermont county, Ohio, makes to us the following statement of the case of his son, aged 12 years:—

In June, 1858, he was attacked while at work in the field; complained of being tired, and of a heaviness; he then became confined to his bed until the next winter. Upon the hip there was a swelling, resembling a boil; this lasted for a few days without suppurating; then the inflammation on the hip subsided, and it began to appear upon the ankle; this became swollen, and was attended with violent pain, which lasted about ten days, at which time suppuration was established, and it was lanced by his physician. After this there was extensive discharge of matter from twelve fistulous openings from the foot to the knee, so much so that by inserting the pipe of the syringe, when filled with water at the lower orifice, the water flowed freely from every opening, showing a complete communication. So extensive was this that the flesh or muscles appeared to be separated from the bone. At this date the physician pronounced him incurable, unless he would consent to have his leg amputated, and this he stated to the boy and his friends. Even while the doctor advised amputation, he acknowledged that there was but little hope, even from that. The doctor stated to his neighbors, that the boy could not live a month without it. His son objected to any operation, and there being no other hope he began the use of Scovill's Compound Syrup, or Blood Purifier, which he did in the last week in December, 1858. Then his son was confined to his bed, not able to stand upon his feet, or even to turn himself over; loss of appetite; restless at night, with a free and extensive ulceration of the bone; over one hundred pieces have been sloughed off, with all the attendant difficulties upon such a condition.

This medicine has been exclusively and continually given to the present time.

His condition is as follows: He is able to go any anywhere he pleases; has regained his usual strength; his appetite is good; the suppuration of the leg is arrested, except in three small places, attended with but little discharge, only enough to stain the dressing in the twenty-four hours.

He now regards his son as well. This is one of the most desperate cases of scrofulous disease of the bone ever cured.

One very remarkable feature of this case is, that the leg has regained its natural size and length, and there is not the least deformity in the limb.

March 29, 1860.

CHAUNCEY, Athens Co., O., Feb. 29, 1860.

Thinking that you would be pleased to hear what success the Compound Extract of Sarsaparilla and Stillingia had met with in this vicinity, I venture to send you a statement of a case treated by me in this place. The patient was a young lady rapidly sinking under the full development of scrofula, profuse scrofulous discharges, etc. She had been under treatment for some time, with the advice and counsel of several eminent physicians, previous to coming into my hands, without receiving any benefit. Since she has been using the Blood and Liver Syrup, her improvement has been rapid and satisfactory.

Yours, C. W. PRATT, M. D.

NEW WASHINGTON, Crawford Co., O., Jan. 24, 1860.

I send you a statement which is correct:—A young man in this place, who had the scrofula so bad that the doctors gave him up, and considered his case incurable, tried all remedies he could hear of. His mother came into my store and wanted to know if I had anything that would cure him. I recommended Scovill's Blood and Liver Syrup. She took one bottle, and since that she bought two more. The first bottle got him on his feet, and the second enabled him to walk, the third she obtained this morning.

He was the worst looking living human being you ever saw. He was paler than a corpse, and had sores on him larger than my fist, in different places. The above is a true statement.

His skin has now a good color, and he feels well. He was actually the worst looking living being I ever saw; a man could not look at him without feeling the deepest pity.

Yours, W. H. PRATT, Druggist.

CUBA, Monroe Co., Iowa, October 21, 1859.

Having seen in the May number of your journal a notice of Scovill's Blood and Liver Syrup, and its effects upon the system, I procured at Chicago a dozen of the medicine to try in a case of goitre. I have also prescribed it in a case of enlargement of the heart, of about 18 months' standing. He had tried every remedy, but kept growing worse. When I commenced prescribing for him, he had two spells every 24 hours—one at night and one in the day—when everything would be a perfect blank before him. He could neither see nor talk, and the circulation would stop. When it commenced again, his heart would throb so that you could see his clothes over it move with quite a jerk, and you could hear his heart beat within six inches of his breast. He has taken nearly four bottles of it, and now appears as well as he ever was; says he feels well and has had none of those spells since he had used a few bottles of the medicine. He has been at work for the last three weeks. I am still treating that case of goitre, and will report progress.

Yours, ALEXANDER GASTON, M. D.

COOPER'S PLAINS, Steuben Co., N. Y., March 1, 1860.

It is with pleasure that I write you in regard to Scovill's Blood and Liver Syrup. I think it one of the best purifiers of the day. It has met with perfect success in every case where

I have used it. My first case was that of a young child about eighteen months old, troubled with erysipelas and scrofula very badly. By the use of the Blood and Liver Syrup, it has entirely recovered. The other case was that of a lady who had been afflicted with scrofula for the last twenty-five years. She had tried the prescriptions of the most skillful physicians in this part of the country, with no beneficial effect. She commenced using the Blood and Liver Syrup in November, and at that time was in the most deplorable condition, having been unable to do any work for the past twenty years. She is now entirely well, and able to attend to her work.

S. W. Everett, M. D.

We have been particular in giving a few of the many cases that have come under our observation, and also a few extracts from the many letters that have been received respecting this Compound, that it might be seen by the readers of this journal, that other physicians have used it with as much success as we have.

Art. VI.—*Egg-Shells in Dropsy.* By W. S. Latta, M. D.

My attention was called to the use of egg-shells in the cure of Dropsy, by a woman, and I do not remember of ever having seen them recommended in any print which has come under my notice. I have therefore thought it best to give to the public my small experience with the article, and in order to do so I will report a case which was treated by me last fall.

Charles Smith, aged about thirty years, was employed as a driver in the trains of Majors and Russell, starting from Nebraska City to Salt Lake. Becoming sick on the Plains with intermittent fever, he was carried to Fort Kearney, and there left for medical treatment. He stated to me that he there took a large amount of calomel and quinine; so much of the latter that he almost lost his hearing. Dropsy began to set in, and he requested the attending physician to give him nitre, but he refused.

The fever being gone, dropsy succeeded, and water accumulated to such a degree that he had to sit upright to sleep, (losing his breath immediately upon lying down). He was loaded into a wagon with one of the returning trains and sent home to Rock Bluff, where he applied to me for treatment.

Treatment:—

℞.—Pulv. Egg-Shells, ℥ ij.
Jalap, ℥ iss.
Potassa Bitart, ℥ j.

Mix, and take a table spoonful three times a day.

If it fails to act freely on the bowels, increase the jalap and cream of tartar until it does.

When this treatment was commenced his ankles were thicker than his thighs were before he became dropsical, and in a remarkably short time (I think less than two weeks), there was not a sign of dropsy, either anasarca or ascites, upon his person. The use of the shells was continued for some time afterward, and the cure remains permanent.

The *modus operandi* of the agent I will not attempt to explain.

I do not claim any greater virtue for the article on account of the source from whence I obtained my information; neither do I believe that because an ordinary woman told me of it, that its virtues are, for that reason, any the less. My informant recommended the taking of it in warm water. These instructions, however, I have not followed, but in every case where I have used the article, it has been with complete success. Try it, and report.

ART. VII.—*A Rare Case.* By A. BECK, M. D.

The following remarkable case of idiosyncrasy fell under my observation, July 21, 1856, when I was summoned, in haste, to the house of Mrs. S——, whose little girl, the messenger said, was "choked." As the case was in the village but a short distance from my office, I was but a few minutes in reaching the house after receiving the message.

I was soon satisfied they had been mistaken in their diagnosis. The patient (a little girl about three years old), seemed to be in great agony, keeping one hand about the mouth and introducing some of the fingers, as if attempting to extract a substance lodged about the fauces, and uttering incessant but unintelligible complaints, as articulation had become very indistinct.

The tongue began to swell as the sufferings of the patient increased, but the swelling soon became more general, extending over the whole face, and almost closing the eyes, which appeared considerably inflamed.

A rash now made its appearance, resembling roseola, covering the face, neck and arms, and the body as low as the cardiac region. The parents gave me the following history of the case:—

The child appeared as well as usual till within a short time previous to sending for me; had eaten nothing but a filbert or two and part of the kernel of a Brazil-nut, (Bertholletia Excelsa), the last named being eaten just prior to the development of the above named symptoms. As I had to name the disease to satisfy inquiring friends, I called it erysipelas, and commenced giving Tinct. Ferri Chloridi in doses suited to the age of the patient, being dissatisfied in the mean time as to the true character of the disease. In about three hours from the time I commenced giving medicine, the violent symptoms began to abate, and next morning (I was called to the case about dark), the child was almost well.

In about a year afterward I was called to see the same child. Symptoms the same as above described. On inquiry, I learned the child had eaten part of the kernel of a Brazil-nut, and had scarcely swallowed it before the symptoms began to appear as above described. Judging from the remaining part, I think the child did not eat more than about one-fifth of the kernel the last time. I treated the case the same as before, with a similar result. The parents, however, cautiously guarded the child from attempting a third experiment of the above description.

PART SECOND.

SELECTIONS.

Aphorisms on the Hygiene and Nursing of Infants. (Translated from the French for the Western Lancet.)

The child should be subjected to hygienic regulation from its cradle, in order to sustain its constitution if it is good—in order to ameliorate it if bad.

We must combat, in early infancy, the scrofulous, gouty and syphilitic dispositions inherited from the parents.

A man with impure blood should never think of perpetuating his race.

A woman who becomes *enciente* should renounce those habits, pleasures and fatigues, which may exercise an evil influence upon the health of the fetus, if she wishes to give birth to a healthy child.

Blood-letting has a good effect upon gestation, but it should not be used unless plethora, local or general, is present. [Should never be used.—Ed.]

Denial of the unreasonable caprices of a pregnant woman can not have any influence upon the health of the infant.

A woman can and ought to nurse her child, if she is in good health, and if her parents or immediate relations are not scrofulous, consumptive or cancerous.

There are women of good constitution unable, nevertheless, to nurse, for their milk is small in quantity, badly elaborated, and dries up from the slightest causes.

A woman in whom the mammary secretion is very active previous to her accouchement, is almost always a good nurse.

A mother who nurses can commence six or eight hours after the birth of the child.

A woman who nurses should not suckle the child oftener than every two hours.

An infant that takes the breast at regular intervals, sucks with more avidity than others, and drains the breast of all the milk it contains; and it is the part last obtained which is the best, as it contains more cream than the first parts of the flow.

Between eleven o'clock at night and six or seven in the morning, a good nurse need only suckle the child once.

It is dangerous to take for a hired nurse a primaparous woman; she is necessarily inexperienced.

A good nurse is from twenty to thirty-five years of age, with brown hair, the gums bright red, the form inclined to *embonpoint*, the breasts well formed, firm, and marbled with bluish veins.

A nurse should not have any mark, recent or ancient, of scrofula or syphilis.

The milk yellowish in the first month after birth, and bluish white afterward, is an alkaline emulsion formed of water and solid principles dissolved or suspended.

The milk should be abundant to be profitable.

The first part of the milk drawn from the breasts is serous, the second part is thicker, and it is the last part of the draught which is the richest and the most charged with cream.

The milk (examined by the microscope) should be filled with globules, numerous, tolerably large, and well formed—for small globules, resembling dust, are a sign of its bad elaboration, and of its insufficiency.

Too few, or too many globules, are equally injurious.

The milk varies in its composition according to the idosyncrasy, temperament, constitution, the time elapsed since the accouchement, the time since the last repast, the regimen ot the nurse, the action of the genital organs, etc.; but the differences are not so great as to modify the precept—"If the infant thrives, then the milk is good."

The milk is altered in composition by the febrile state, and by acute and chronic diseases.

Fever diminishes the quantity of milk, reduces the number of its globules, and concentrates its solids in a smaller proportion of water.

The effect is the same, in different degrees, in all acute affections, and in some chronic ones.

Pus is sometimes mixed with the milk in cases of abscess of the breast.

The milk of a healthy nurse, which is too rich or too highly charged with solid elements, is indigestible, and causes diarrhea.

Milk altered, reduced and impoverished by fever or disease, also causes diarrhea.

The influence of diseases upon the composition of the milk is not special and specific, for they all have the same effect, which is the same as that of fever.

Milk altered in its composition by fever or disease does not always exercise an injurious influence upon the health of the child.

Whatever may be the cause of alteration in the composition of the milk, the result is always the same for the infant—the accidents which arise have always for their seat the digestive canals, and diarrhea is always the consequence.

Milk which does not present any alteration appreciable to chemical analysis, may yet be altered in its intimate elaboration in such a manner as to make it an injurious aliment.

Spasms, or instantaneous convulsions, result ordinarily from changes caused in the secretion of milk by mental affections, too lively emotions and impressions, agreeable or painful, experienced by the nurse.

Mental impressions dry up, suddenly, the secretion of milk, or modify seriously the proportion of its solid elements.

The happiness which a woman feels in fulfilling her duties of nurse, is the cause of the internal sensation at the moment she is going to nurse the child, known as the *draught*.

The premature return of menstruation in a nurse modifies slightly the chemical composition of the milk, and injures its elaboration; but if the infant does not appear to suffer, which often happens, the nurse may be retained.

A nurse should abstain from sexual intercourse if she experiences great excitement.

A nurse should likewise abstain through fear of pregnancy, which modifies the milk in quantity and quality, so as to render it injurious to the child.

A change of nurses has no injurious effects when necessary to replace a poor one by a better.

The nurse should be changed as often as may be necessary.

Suckling, by mother or nurse, may give place to artificial feeding.

Feeding by the nursing bottle is far inferior to suckling, although, when well carried on, it sometimes yields highly satisfactory results.

Artificial foods should be administered during the earliest periods of life, by means of the nursing bottle, filled with tepid milk diluted with barley water or oatmeal gruel; afterward, with milk alone.

An infant needs nothing more than milk during the first months of life. At the age of six months it may commence to take light soups.

Greasy articles of food should not be given until after the first year.

The time of weaning should be fixed between the twelfth and twentieth month.

One of the periods of repose in the progress of dentition should be chosen for weaning—that which comes after the appearance of the first twelve or of the first sixteen teeth.

Weaning should be commenced by keeping the child from the breast during the night.

After some weeks' separation from the mother at night, the child should be denied the breast in the daytime also, and it thus arrives at an independent existence.

Infants and children should be carried into the sunlight and open air in all kinds of weather.

Clothes which fit the body without constriction are preferable in all weathers to loose ones, which expose different portions of the skin to the cold.

Infants should be washed in tepid water every day, and as they become habituated to it, in water nearly cold.—*Med. Jour. N. Car.*

Treatment of Gonorrhea and Gleet without Copaiba.

Mr. Weeden Cooke read a paper on this subject before the Harveian Society, January 19th, 1860. After referring to Sir Astley Cooper's method of treating gonorrhea, the author stated his belief that he was only giving utterance to a largely-acknowledged experience when he ventured to affirm that copaiba, in the treatment of gonorrhea, was not only unnecessary, but that it was in a great many instances injurious, and that in all it was offensive to the last degree. During the last fifteen years at least six thousand cases of gonorrhea had come under the author's care at the Royal Free Hospital, and he had availed himself of these large opportunities to test all the methods of treatment which had been suggested, in order to arrive at the safest, quickest, most efficacious, and least disagreeable mode of curing this disease. As introductory to the subject of treatment, Mr. Cooke discussed the subject of the cause of chordee, the reason for the scalding of the urine, the distinction between true and spurious gonorrhea, and the time when infection may or may not be apprehended. The conclusions he arrived at were—

1. That chordee, in ninety-nine cases out of a hundred, was due to spasm, and not to effusion of lymph; and that cubebs, acting as an antispasmodic, formed the most efficacious remedy for this symptom.

2. That the scalding was the result of the acid urine passing over the highly inflamed mucous surface of the urethra; and that this was to be remedied by the administration of the alkaline carbonates for the purpose of neutralizing the acidity of the urine, thus removing the principal cause of the continuance of the inflammation.

3. That, in all disputed cases, the true gonorrhea may be known from the spurious by the presence of redness, heat, pain and swelling, together with a purulent discharge, more or less green and offensive; whilst a discharge produced by connection with a person who has leucorrhea, or has recently been confined, will not be accompanied with these inflammatory signs, and the discharge will be milky in consistence and color, differing much from the thick purulent discharge of the veritable gonorrhea.

4. The time when infection may or may not be apprehended was discussed, in its incubative stage and at its close. A case was given, showing that the disease may be caught from one person, and not communicated to another two nights after, because the purulent discharge had not commenced at the time of the second intercourse. Respecting infection at the close of the disease, the author had been enabled, from expe-

rience, to establish as a law for his own guidance, that gleet—*i. e.*, a mucous discharge from the urethra, consequent on gonorrhea—does not set up gonorrhea in another person; but that, whilst any pus is to be found in the discharge, there is probability of infection.

Passing on to the subject of treatment, Mr. Cooke said that, upon inquiry at the London Custom House, he found that 118,396 pounds of copaiba were admitted into the port of London only during the first ten months of the year 1859. If this be administered at the rate of half a drachm three times a day, and supposing each patient takes it for three weeks, we have here copaiba enough to treat 473,584, or close upon half a million of persons, and that in ten months only of the year. Considering how often it fails to cure the disease; how frequently it is rejected by, or at any rate disorders, the stomach; how tell-tale and disagreeable is its odor from the mouth and skin; how occasionally it produces a papular eruption all over the body; and that, in many instances, swelled testicle and stricture may be traced to its irritating influence, while gonorrhea, rheumatism and ophthalmia have been attributed to its administration. "Considering all these objections," the author remarked, "is it not extraordinary that this disgusting medicine continues so long to hold its ground?" The abortive treatment by strong injections of nitrate of silver had proved a failure, because, in some instances, inflammation of the bladder had resulted. The treatment by diluents was slow in its action, and not readily employed by persons engaged in active business. That by diuretics was scarcely more successful; whilst the administration of saline aperients was generally attended with an aggravation of the ardor urinæ as well as chordee. The treatment which had been most successful in the author's experience was the chemical treatment by the alkaline carbonates, given with a view of neutralizing the acid in the urine. Thus one great source of irritation was removed from the inflamed urethra, and the subsidence of the inflammation, which nature would effect, was allowed to take place. As auxiliaries, especially when there is œdema of the prepuce, lead lotions, and elevation of the penis against the abdomen, were commended. The inflammation having subsided, and a muco-purulent discharge being left, the author had found, after having given trial to all the injections which have been at any time in vogue, that the chloride of zinc, introduced into this branch of practice by Mr. Lloyd, of St. Bartholomew's, was the most efficacious of any in curing the disease, and that with less discomfort and in a much shorter time than by any other means. Since employing this treatment he had had little, if any, orchitis amongst his patients. The strength of the injection he most commonly employed was two grains to the ounce, but in some instances one grain to the ounce was sufficient. Whilst advocating this treatment in persons of healthy constitution, it was necessary to completely change it in others. In the strumous, in the dyspeptic, in those of dissipated habits, and where the diseased person is an old offender, the alkaline carbonates are not called for, because either the urine is not acid, or the inflammation does not run high. In such cases the tincture of iron, or sulphuric acid and bark, or gentian, or columba, may be advantageously employed from the commencement; and the chloride of zinc injection, in these cases, is also of the utmost value in rapidly overcoming the disease.

Respecting diet, the author considered that after the subsidence of the inflammatory symptoms scarcely any restriction need be enforced, and that beer or wine in moderate quantities may be advantageously used by those who are accustomed to these beverages. He had found long-established cases of gleet yield readily to the chloride of zinc injection, accompanied with tonic treatment and generous living.

In conclusion, he would rejoice if the treatment he had found so serviceable should be followed out by others, and thus assist in banishing altogether from surgical practice the use of so nauseating a drug as copaiba.—*Am. Jour. of Med. Sciences.*

PART THIRD.

CLINICAL REPORTS.

Newton's Clinical Institute.—*Spring Session of* 1860.—Services of Prof. R. S. NEWTON.

REPORTED BY JAS. A. HENSHALL, M. D.

CASE 631.—Feb. 17.—ANNIE MARIA WELSH, aged 7 months. *Tinea Capitas.* This little child has been affected about four months with what is commonly known as scald head. The disease, as you can see, covers the entire scalp, from which there is considerable secretion. There are also several distinct ulcers, which are quite deep, and of a somewhat dangerous character.

This disease is, as you are aware, of a contagious nature, and may be occasioned by using a comb or towel that has been used by a person so affected. The disease first appears in the form of specks, of a crusty character, and rising but little above the common level of the surrounding surface. They exhibit no method in their location, but are scattered over the surface without order; sometimes they continue quite distinct, but at other times they are crowded, and as the scabs, which succeed the pustules, enlarge, they mingle together, so as to cover continuously, large portions of the surface. When the scabs have enlarged and mingled together, they form a great many cup-like hollows, which bear a considerable resemblance to a honey-comb.

Some authors sub-divide the disease into six or seven varieties, but this is not important, as they generally exist more in imagination than reality. They all yield to the same plan of treatment, and as there is only one indication to fulfil—which is by local applications—it is at least a mere loss of time and labor to arrange the disease into different classes.

The following treatment, gentlemen, will eradicate the disease in any of its forms. I have applied it in hundreds of cases without a single failure:—

℞.—Acid Oxalici, grs. xx.
Aquæ Bul., ℥ iv.
M. et adde—
Acid. Acetici, ʒ j.
Creasoti, gtts. xx. M.

Apply several times a day, followed by—

℞.—Ung. Zinci Anodyni,
Glycerinæ, *aa* ℥ j. M.

Feb. 24.—Improving. Continue treatment.

March 20.—Discharged, cured.

CASE 632.—Feb. 17. JAMES O'CONNER, aged 26. *Acute Ophthalmia.* This patient is afflicted with Purulent Ophthalmia, both eyes being affected. The conjunctivæ are much inflamed and engorged, the left eye being the worst; tongue coated; bowels inclined to constipation.

"How long have you been affected, Mr. O'Conner?"

"About three weeks, sir. I caught it by using a towel that was previously used by some children in the Orphan Asylum, where I am engaged."

"Have many of the children got the disease?"

"Yes, sir; nearly all of them."

"Do you have much pain in your eyes?"

"Yes, sir; a great deal in my eyes and forehead; my eyes feel as if there was a hair or a grain of sand in them, and in the morning my eyelids are glued together."

This variety of Ophthalmia is sometimes called Egyptian and sometimes Contagious Ophthalmia. The first appearaace of inflammation, after the application of the virus, is seen in the conjunctiva of the lower eyelid. It assumes first a mottled appearance, and then a fleshy redness. A little mucus is generally present at the doubling of the conjunctiva, at its lower part. The progress of the inflammation, when it extends from the palpebral conjunctiva to the conjunctiva covering the cornea, is often so rapid as to elude any distinct observation, but frequently it advances more gradually. The chief uneasiness is a feeling as of a hair or sand lodged in the eye. This is more confirmed in the mind of the patient on account of the sensation coming on suddenly, and after a time as suddenly ceases.

This disease, when neglected or improperly treated, is productive of numerous diseases of the eye, and finally of entire loss of vision.

In this case I will prescribe as follows:—

℞.—Podophyllin, grs. iij.
Leptandrin.
Iriscin, *aa* grs. x.
Morph. Sulph. grs. j.

M. ft. Pil. x.

Take one pill every night and morning.

℞.—Quiniæ Sulph. grs. xx.
Gelsemin, " ij.

M. ft. Pil. xij.

Take one pill, three times a day.

℞.—Hydrastin, grs. x.
Zinci Sulph. " ij.
Morph. " " v.
Aquæ Rosæ, ℥ ij.

M. ft. Collyr.

Apply several times a day.

Feb. 24.—Improving in every particular. Continue treatment.

March 2.—Eyes still weak, but much better; not much congestion; slight secretion from left eye; right eye is nearly well. Continue treatment.

March 23.—Discharged, cured.

CASE 633.—Feb. 28. JNO. SMALL, aged 25. *Irritation of*

Bladder. This patient is laboring under irritation of the kidneys and bladder, with incontinence of urine.

"How long have you been affected, Mr. Small?"

"I have been affected two months, sir."

"Do you know what caused this disease?"

"I think, sir, it was caused by my taking cold about that time."

"Do you have any control over the urinary organs?"

"Very little, indeed, sir; and very often I can not control them at all."

"Do you have much pain?"

"Yes, sir, a great deal in my bladder, and also in the small of my back."

In these cases, gentlemen, avoid the use of all stimulating diuretics. This is an error into which a great many many have fallen. As soon as a patient complains of a disease of the urinary apparatus, they commence immediately with the whole catalogue of stimulating diuretics, which, instead of doing good, only serve to increase the disease and the sufferings of the patient.

In the treatment of this class of diseases, I have derived great benefit from the Iodide of Potassium, and in this case I will give the following:—

℞.—Potassi Iodid, ʒ j.
Aqua Rosæ, ℥ iv. M.

Take a teaspoonful, three times a day.

March 2.—Says he is much better; has now a slight control of the urinary apparatus; passes water at regular periods during the day. Continue treatment.

March 6.—Discharged, cured.

Case 634.—Feb. 28. Stephen Daniels, aged 41. *Irritable Ulcer.* Gentlemen, I here show you a strongly marked irritable ulcer, situated about the lower third of the tibia. You perceive that the patient walks quite lame from the effects of the ulcer, which in itself does not seem of much moment; but, gentlemen, the pain arising from this class of ulcers is sometimes unsupportable, and they are extremely difficult to cure; they often baffle the efforts of our most skillful physicians.

This form of ulcer is exceedingly sensitive, and readily bleeds when touched. It discharges but little matter, and that is often of a sanious character, very corroding, and not unfrequently quite fetid. Its granulations are imperfectly formed, spongy, and are either of a redish or whitish vascular look. The edges are generally ragged and uneven, and the whole is surrounded by a swollen, reddened, and often œdematous condition.

This patient has been under treatment for two months, but has derived no benefit therefrom.

I will prescribe the following:—

℞.—Quinæ Sulph., grs. x.
Gelsemin, " ij.
Morph. Sulph., " j.

M. ft. Pulv. x.

Take one powder, three times a day.

Apply chloride of zinc paste to the ulcer.

March 2.—Has been very painful until this morning, but feels much better to-day. There is a complete eschar formed over the ulcer. Continue the powders, and apply mild zinc ointment to the ulcers, and dress with adhesive straps and bandage.

March 9.—Improving rapidly; has not much pain; can walk quite well; ulcer has assumed a healthy appearance; edges slightly elevated. Continue treatment.

March 23.—Discharged, cured.

CASE 635.—March 2. JAS. O'HARA, aged 24. *Gonorrhea.*

"How long have you been affected, Mr. O'Hara?"

"About six months, sir. I have been taking medicine for six weeks. I thought I was getting better, but I have been worse during the last week."

"What is the condition of your bowels?"

"They are not very regular, sir."

"Do you have any pains?"

"I have a pain in the small of my back, and also in my groin."

He says the urethral discharge is quite copious, and that he is very weak in the back.

Gonorrhea is, as you are aware, a contagious disease, and can only be produced by actual contact of the virus with the organ affected; but it is not necessary that copulation should take place in order to produce this disease, as it may be contracted by contact with the virus from the clothing, or from the seat of an out-house; nor does it necessarily follow that every one having connection with a person affected with a recent gonorrhea, should become similarly affected.

In the treatment of this disease, I rely entirely upon internal remedies, as the use of injections are often productive of serious consequences, as stricture, etc.

I will accordingly give the following in this case:—

℞.—Misturæ Nigri, ʒ vj.

Take a half table spoonful, three times a day.

This, which I call the Black Mixture, is composed as follows:

℞.—Bals. Copaibæ, ʒ iv.
Con. Tinc. Gelsemini, ℥ ss.
Spts. Nit. Dulc., ʒ vijss.
Fl. Ext. Buchu, ℥ iss.
" " Cubebæ, ℥ j.
Tinc. Chimaphilæ, ʒ iss.
Mellis, ʒ x. ft. Mist.

In order to color the above, add—

Ferri Prus. ʒ iss.
Aquæ Distil. q. s. to dissolve.

March 6.—The discharge has ceased, but there is still a slight irritation of the meatus. Continue treatment, and will also prescribe—

℞.—Comp. Podophyllin Pil. xij.

Take two pills every night.

March 16.—Discharged, cured.

PART FOURTH.

EDITORIAL.

DR. COE ON MINERAL WATER.

Our readers will peruse the following article from Dr. Coe with much interest; for it is well known to all that he is in every way qualified to handle, with great ability, every subject which he discusses:—

Alleghany Springs, *Montgomery Co., Va.,*
July 18, 1860.

Prof. Newton:

My Dear Sir,—Knowing that your columns are ever open to every subject having a bearing upon the welfare of the human family, I desire to occupy a brief space in speaking of the spontaneous agencies kind Nature has furnished for the cure of disease. I refer to the Mineral Waters of Virginia.

The number and variety of medicinal springs found within the borders of the "Old Dominion," is truly astonishing. At present I desire more particularly to refer to the springs above named. They are situated in Montgomery county, four miles south of Shawsville depot, on the Virginia and Tennessee Railroad, and 77 miles west of Lynchburgh. They belong to the class of saline waters, but they seem to be *sui generis* as regards their therapeutical peculiarities. No reliable analysis has as yet been made of the waters of this spring; therefore, the testimony I shall have to offer in support of their curative powers, will be based entirely upon a personal and observant experience of their physiological influences.

From my own personal experience of their control over the functions of the system, corroborated by the individual testimony of hundreds of invalids, I claim that, as a curative agency, they are unrivaled in diseases of the liver, spleen, kidneys, stomach, bowels, glandular system and skin. The complaint for which these springs are mostly resorted to, is dyspepsia, and I must confess that the cures of that complaint, effected here, are such as to almost stagger belief. The patients themselves are upon the ground, however, and unless a man doubt the evidence of his own senses, he must be convinced. Four or five patients left here yesterday, perfectly *cured* of long standing dyspepsia. A large number are here, experiencing daily amendment, and many are sojourning here in good health, on a kind of grateful pilgrimage to the Mecca of their restoration. One old gentleman is still staying here, who was cured of nephritis of two years' duration in two months. Four years ago he was cured of a severe attack of dyspepsia by the same agency. He is about seventy years old, and his general health now appears as good as that of any man of middle age.

A most remarkable case of dermoid disease has come under my observation since I have been staying here. The case is that of a young man from Louisiana. A year ago he visited the Hot Springs of Arkansas, then laboring under a general constitutional debility. While bathing in those springs, he was surprised by tne sudden appearance of an eruption upon the skin, at first of a vesicular character, but soon changing into a dry, scaly, desquamating character, and diffusing itself over the whole body. Finding the continued use of the Arkansas waters to aggravate the difficulty, he shaped his course for the Alleghany Springs, from whence, after a few weeks stay, he returned home almost entirely well. A little of the eruption still remaining upon the right side of his neck, he is now here for the purpose of effecting a final and total eradication of his complaint. His general health is most excellent. He has been here but a few days, yet the eruption is disappearing with great rapidity.

Chronic diarrhea and dysentery are cured with great certainty and permanency. Gravelly affections, enlargements of the spleen, defective cutaneous depuration, and general hepatic and portal disturbances are more effectually under the control of these waters, than any single agency I am acquainted with. Of these facts, I speak from personal observation.

Of my own case I have not yet spoken. I have been a miserable dyspeptic since I was eight years old, a period of twenty-seven years. I might even date earlier, did my memory serve me. My case is a peculiar one. The foundation of all my subsequent sufferings was laid when I was nine months old. At that age, while laboring under a simple cold and infantile fever, a physician was called, who administered to me tartarized antimony in such quantity as to produce a series of convulsions of the most violent and alarming character. These finally passed away. I relapsed into a state of coma of eight days' duration, taking no nourishment whatever during this time, and manifesting but little signs of life. Three times during this period I was considered lifeless, and was disposed of as a corpse. An experienced nurse and a woman of strong common sense—my mother's sister—finally assumed the responsibility of my case, and with the aid of hot baths and stimulating enemas, succeeded in kindling the smothered spark of life into a little flame, which has flickered feebly in the socket from that time until the present.

At two years of age I eat, voluntarily, a large quantity of mixed paints, from the effects of which I again came near dying. Between this period and the age of twelve, I was visited by every form of contagious disease to which children are incident, the diathesis previously established in my system seeming peculiarly to favor their induction. I can most truthfully say, that for a period of upward of twenty years I have scarcely known a single day in which I have not been cognizant of the presence of some symptom of indigestion, such as acidity of the stomach, a daily annoyance, flatulence, eructations, vomiting up of meals, gastralgia, etc. Portal congestions, sick headaches, hemorrhoids, bilious colics, neuralgia and rheumatism, have each added their quota to the general fund of bodily suffering. Frequent attacks of hepatitis intervened between the ages of twenty and thirty. At the age of thirty-three, it assumed the chronic form, complicated with bronchial, laryngeal and pharyngeal irritations; from which complications I am now suffering.

I arrived here on the evening of the 5th inst., completely prostrated and exhausted from the effects of previous debility and the fatigues of travel. I was unable to reach my room without the support of my servant. I did not commence the use of the waters of the spring until Saturday morning. By

Monday evening, I was relieved of a nephritic colic, from which I had known no release, night nor day, for three months. At the same time, the soreness in my liver and spleen, and a very sore spot in the stomach, together with a cramp that would take me in the latter organ whenever an attempt was made to cough, and which would fairly make me yell with agony, were entirely removed, and there has been no return. The neuralgic distress in the back of my neck, shoulders, chest, etc., has measurably ceased. For the relief experienced within the first three days, I would not have taken $5,000. My digestion has been improved, and is still improving. I have not as yet gained much strength, as the water has been operating too freely upon the secernent system to allow me to do so. I hold my own, however. My night sweats have ceased. My skin and kidneys are improving in function and tone every day. I have had an attack of acute laryngitis since my arrival, owing to the contraction of a severe cold. In view of this, I shall leave here on the 23d inst., on a trip to the Red Sulphur Springs, long and favorably known in the relief and cure of catarrhal, laryngeal, pharyngeal, tracheal, bronchial and pulmonary irritation. I shall stay two weeks, then return here and remain until the first of September, after which I expect to resume my practice in Wilmington, N. C. I have several patients here from Wilmington, all of whom are improving. I would advise every Eclectic who sends a patient to the springs, to first diagnose his case closely, and if he have the mercurial, arsenical, lead, or other diathesis, to not let him depart without having reduced the metal from his system by electrolysis. Such is my practice, and I find it to succeed admirably. First pour on your water and put out the fire, and then call the carpenters and masons to repair damages. In other words, eradicate the diathesis, which is the originator of the train of symptomatic derangements under which the patient is laboring, and then place him under the operation of those sanitive influences compatible with the necessities of his condition, and they will now meet with no hindrance to their co-operation with the vital forces. Whatever improvement the patient then experiences will be a permanent investment. Very frequently patients benefitted by a stay of a month or two at these springs, lose all the good they have received as soon as they pass from under the influence of the waters, the mercurial diathesis again resuming control. The water served but to hold it in an even check. Of this fact I have had personal observation. As a general thing, however, the waters of this spring are renowned for the wonderful permanency of the cures they effect.

The establishment is at present conducted by Messrs. Booth & Calhoun, than whom no two gentlemen could be more admirably and efficiently adapted to the position they occupy. Known and respected by a large circle of friends as men of sterling integrity, exalted business talent, and indomitable energy, their names, wherever known, are their best recommendation. Of warm and sympathetic natures, they are constantly employed in devising and executing ways and means for the promotion of the comfort and pleasure of their guests. The property upon which these springs are situated came into the possession of Messrs. Booth & Calhoun last October, by purchase; since which time they have expended upward of twenty thousand dollars in effecting various alterations and improvement. They have brought pure spring water from the mountain, half a mile distant, and established hydrants for the cottages, and at various points on the premises. They have entirely re-worked the road to the depot, and it is now as fine a mountain road as any leading to the springs. Improvements are still going on, and eventually these springs will be the most favored in the mountains. The beauty of the surrounding scenery, the popularity of the proprietors, and the wonderful curative properties of the spring, can not fail to attract a yearly increasing number of visitors, and to realize for the proprietors a well-merited fortune. The present capacity of the hotel, with the fine cottages attached, will accommodate four hundred boarders *comfortably*. By a little *packing*, four hundred and fifty can be disposed of. Since the opening of the season, there have been upward of six hundred arrivals; and at present we have upward of three hundred permanent boarders, besides some seventy boarding transiently. A pleasanter, quieter, more sociable collection of people I never saw. Every one seems "pleased and contented," as the proprietors claim they intend to make them, in their advertisement. I forgot to mention that a fine garden is attached to the place, from which we have daily a fresh and abundant supply of vegetables in every variety. Milk and butter are abundant, and of the finest quality. The beef, mutton, etc., come from the best Virginia grazing districts. Messrs. B. & C. have the credit of having the best corps of servants in the mountains.

But my time is up, and I must close. I will report for the September No., hoping then to be able to give you a qualative analysis of the water.

Very truly, yours, GROVER COE, M. D.

ECLECTICISM—ITS PROGRESS.

ALL theologians, predicating their opinions upon the word of God, put different constructions upon that instrument, and lay out very opposite routes to the golden gates of heaven. The disciple of Calvin preaches the doctrines of infant sprinkling, predestination and election. The gentleman of the "white cloth," claiming to be a representative of the ancient Waldenses and Albigenses, contends that purification by water, not by pouring and sprinkling, but by absolute submersion, is a *sine qua non* to admission through the portals guarded by the flaming sword of St. Peter. The follower of Wesley denies predestination and election, and advocates free-agency and back-sliding. The man with dignified mien, with the long robe and badge of the cross, arrogates much power to himself and barters passports to heaven for money; while another preaches the comfortable doctrine that all, without distinction, will be equally rewarded hereafter. The leaders of these various theological systems, bigoted in opinion and vindictive in spirit, substantiate their views by powerful arguments from Holy Writ, and with unchristian profuseness hurl their abuses and denunciations against those who differ with them in their scriptural constructions.

If, then, in the matter of religion, where all lay the foundation of their belief upon a single book, there should be such contrariety of opinions, such different interpretations of the same language, such wrangling and fighting for the true way, and such heaps of abuse poured against opposing sects, is it surprising that men should differ in their opinions relative to so uncertain a science as that of medicine? It is the nature of mankind to take opposite views and form different conceptions of the same subject; and when a number are prosecuting their inquiries in relation to any particular object or science—whether politics, religion, morals or physic—those who entertain similar opinions will range side by side and constitute a sect. Hence, in medicine, we have the Allopath, with his calomel and lancet; the Homœopath, with his infinitessimal pellets; the Thompsonian, with his steaming and red pepper; the Hydropath, with his douche and sheet-pack. Each believer in these various "paths" thinks his system correct and the others wrong, and takes peculiar pleasure in hoarding up curses to dedicate to those who happen to differ with him in opinions. The truth is, the dogmas of none of these sects are entirely right. They all contain some truth and much error; and the observation of this fact led to the origination, about forty years ago, of a new system, which has not escaped its due share of abuse, malediction and fiery imprecation. At this time the legacy of Paracelsus and the lancet were slaying their thousands, the one-idea systems were doing their mischief, and medicine, designed to be a blessing to the human family, was acknowledged by Great Britain's Royal Physician—the candid Dr. Forbes—to be an entire failure, and productive of more misery than good. But at this same period a new era dawned upon medical history—an era fraught with incomputable blessings to the human family, and marked with radical revolutions in the practice of medicine. A few spirits, daring to throw off the tyranny of sectional prejudices and to apply the test of reason and experience to the dogmas of the various schools, selected the truths and facts from these different sources, discarded .the errors, and embodied the principles thus derived into a system, to which the term Eclecticism was applied. Beach and Morrow were the men who took the first steps in this direction, and put in motion the ball of medical reformation. They laid the foundation of a temple upon which has been reared a superstructure of fair proportions and beautiful outline—a temple constituting a fitting abode for the spirit of Æsculapius. We do not claim that the system is yet perfect, but we do contend that it is the best that has ever yet been presented to guide the physician in the cure of disease.

The founders of this sect, borrowing a name from Agathinus of Sparta, christened their system *Eclecticism*, because the word signified "to choose," and their idea was to select the best from every source. Literally, however, the term can be applied to every medical man who selects or chooses such remedies as he deems proper from the vast collections of the materia medica. In this sense all practitioners claim to be eclectic, but the name as now appropriated to designate a system has received a definite and more extended meaning; and there is a vast difference between being eclectic and being *an* eclectic. To be eclectic is to exercise one's judgment in the selection of remedies; to be *an* eclectic is to subscribe to a set of principles of pathology and therapeutics which constitutes the most beautiful and successful system of practice ever conceived. American eclecticism, as we understand it, embodies more than the simple idea of "choosing;" it also discards, totally and absolutely, certain pathological views and therapeutical measures which the experience of ages has demonstrated to be pernicious in their consequences and productive of immense evil. Its representatives stand upon a platform of carefully selected truths, free to accept anything new, after it has been subjected to the test of reason and experience, and are hampered by no tyrannical restrictions from imperious National Associations or stringent codes of ethics.

Renouard, in his History of Medicine, says of electicism, as he understood it, that it is "neither a system nor a theory." Our allopathic brethren, adopting his view, regard eclecticism as quackery, and eclectics as a set of charlatans, having no definite rules of practice and no pathology; as ignorant, uneducated pretenders, who, having collected a little knowledge of the action of a few "roots and yarbs," pretentiously assume the title of doctors, and profane the holy sanctuary of regular physic. Such imputations we will not stop to refute, and will only invite all who desire to know the fact in the case to peruse carefully our medical works and journals. Here they will find recorded eclectic views of pathology and therapeutics, and with proper allowances for individual differences of opinion, they will be found to constitute a most harmonious, rational and beautiful set of definite principles.

Eclectics do not, like Hahneman, claim to have originated an entirely new mode of practice. We do not ride a hobby, or run wild on a single idea. We claim an equal right with the great mass of physicians to use the facts and truths developed by the careful researches and observations of all investigators from the days of Hippocrates to our own time, and to adopt such, and such only, as we deem proper. We accept, in the main, the pathology and physiology of the old school, but yield no blind assent to any doctrine, no matter from what source it emanates. We have made important improvements in the therapeutical application of remedies, and fulfill indications by simple and safe means, without resorting to agents dangerous and destructive to the vital powers.

In the language of the late Dr. I. G. Jones, "We claim safer and more efficient substitutes for that "*Sampson* of the materia medica," that panacea for human maladies, that abomination of the enlightened—the different preparations of mercurial remedies. We claim also to have made large contributions to the materia medica of new and important agents not before known, and to have greatly modified the application of many old ones to subserve more valuable and important purposes in the treatment of disease.

We claim to demonstrate, beyond a chance for cavil, a more successful result in those inflammatory diseases, for which the lancet is unsheathed, and the loss of the vital fluid is considered the *sine qua non.*

We claim to have discovered important truths in the treatment of many diseases not taught in the books or disseminated from college halls.

We claim to have made distinctions in the character of a number of diseases of the most vital importance, and adapted remedies to meet the character of each.

We claim also to have made important discoveries in surgical practice, by which many diseases, heretofore considered incurable without a formidable operation, and oftentimes incurable with it, are readily cured; thus saving the patient great suffering and distress, and at the same time perhaps an important member.

And we claim the confidence of the community for as thorough and scientific acquirements in our graduates as in those of any other college in the country.

In short, we claim as high respectability of character and as thorough scientific acquirements in our profession, far safer remedial appliances, and many new agencies in disease, a more successful result in practice, new views of therapeutic medicine, and important improvements connected therewith, to so great an extent that if the old and new system of medical practice were placed in juxtaposition a striking contrast would be observed in all their leading features."

(*To be Continued.*)

CHOLERA INFANTUM—SUMMER COMPLAINT.

Summer Complaint prevails to the greatest extent during the summer and autumnal months. It is confined to no particular period of childhood, attacking infants from two weeks to several years old.

Causes.—Dentition, worms, indigestible food, acid fruit, malaria, and the atmosphere of ill-ventilated apartments, and close, crowded, filthy streets have been enumerated among its causes. It is most prevalent in cities and malarious districts, and the remittent type of fever always accompanying, indicates a miasmatic complication.

Symptoms.—Cholera Infantum usually commences with violent vomiting and purging; sometimes with simple diarrhœa. The matters ejected are generally yellow, or yellowish green; the evacuations white, watery and slimy, or curdled, sour, offensive, yellowish, streaked with blood and mingled with a tarry substance. The pulse is small, quick and weak; thirst intense; much heat of stomach and bowels; tendency to spasm; rolling of the eyes and tossing of the head from side to side. The fever is usually remittent, with two exacerbations in twenty-four hours. The patient may die in a short time, or linger for several weeks, with great emaciation, and then recover; or, as frequently happens, dissolution eventually takes place, accompanied with spasms from the establishment of inflamation in the meninges of the brain.

Post mortem lesions.—In fatal cases the mucous membrane of the alimentary canal is commonly found inflamed, thickened, hardened or softened; mucous follicles inflamed or ulcerated; mesenteric glands enlarged; liver increased in size; gall-bladder distended; spleen congested, and in protracted cases with convulsions, effusion of serum upon the brain.

Treatment.—In recent cases, with vomiting and purging, apply counter-irritation to stomach, bowels and spine, with leeches to the epigastrium if much tenderness; use frequent injections of common salt in warm water (one teaspoonful of salt to a tea-cup full of water), and administer internally.

℞.—Pulvis Rhei et Pot. Comp., ʒ ss.
Aqua Bullient, ℥ iv.

M. ft. infus.

When cold, strain and give to a small child a half teaspoonful every fifteen minutes until vomiting is checked. Continue the neutral physic and salt water clysters until dark fæcal evacuations are produced, when the treatment must be adapted to meet the indications present.

At this stage of the disease the patient will be found to labor under irritation of the alimentary tract, produced primarily by 1, worms; 2, unwholesome or acrid injesta; 3, atmospheric condition. The *irritation* keeps up a diarrhœal discharge, and a febrile excitement which assumes the remittent type by reason of malarial influence. The indications, therefore, ar to inquire into and remove the cause of the irritation, to control the bowels, and combat the miasmatic fever.

1. Is the irritation caused by worms? This is an important inquiry. If the child be of an age when entozoa are generated in the intestinal canal, and if there is the least symptom of the presence of these parasites, vermifuges should at once be resorted to. We generally give santonine for a day or two, following it with a brisk cathartic.

2. If we ascertain that unwholesome food is the exciting cause of the disorder, the physic and enemas will have properly removed it, and the case, under judicious treatment, will be in a fair way to progress to a favorable termination.

3. If the attack cannot be traced to other causes, it may be inferred that atmospheric condition and miasma lay at the foundation of the disease, and a speedy removal to the pure air of a country retreat will be advisable.

After the causes have been removed, the proper treatment will be as follows: To overcome the irritation of the digestive mucous membrane, apply a spiced plaster over the stomach and bowels, and stimulating liniments to the spine, with mucilagenous drinks. A few green leaves of the *bene* plant, placed in water, forms a nourishing mucilage, which answers an excellent purpose. To control the bowels and tone up the digestive organs, give:

℞.—Syr. Rhei et Pot. Comp., ℥ iij.
Tinct. Pruni Virg. Ess., ℥ ss.
Exct. Geranii Fld., ʒ ij.
Hydrastine, grs. xij.
Tinct. Ol. Cinnamon. ʒ ss. M.

Sig. A teaspoonful, three times a day; to be increased or diminished according to circumstances.

As an anti-periodic, and to overcome the miasmatic complication, nothing is so good as *quinine*, which, in doses suited to the patient's age, should never be omitted during the febrile remissions. If the stomach can not retain it, let it be used by innunction or enema. During febrile exacerbation, let the whole surface of the patient be sponged in a weak alkaline solution, and gently fanned. It carries off excessive heat, lessens arterial excitement, and quiets nervous disturbance. Particular attention must be paid to the child's diet, perfect cleanliness observed, and a plenty of fresh air admitted. The disease can not be cured at once, and an attempt to lock up the bowels immediately, will certainly establish inflammation of the brain, and sign the patient's death-warrant. Beware of astringents.

ECLECTIC MEDICAL INSTITUTE.

We call the attention of our readers to the announcement of the E. M. Institute, in this number. It will be seen that the College is in a flourishing condition, and offers excellent facilities for acquiring a knowledge of Eclectic Medicine, which is daily becoming more popular, and will eventually be the universal practice. Graduates of other schools will do well to attend a course in this Institute.

W. S. MERRILL'S ESSENTIAL TINCTURES.

Every improvement which effects a reformatory movement in the therapeutic appliances for the removal of disease, should receive the careful consideration of every member of the medical profession. During the last few years the Eclectic system has introduced a great number of new remedies and new methods of removing disease, among which are the new preparations introduced by W. S. Merrill & Co., of this city, called Essential Tinctures. We have used these very extensively, and find them very valuable, and convenient, from the fact that they can be taken in small quantities. We append the following letter from an old school physician who has given these preparations a fair trial:—

Messrs. W. S. Merrill & Co.:

Gents.,—I received the specimen of your Essential Tinctures, sent through your kindness; and you will permit me to return you my heartfelt thanks for them. They far surpass anything I have ever used. The Essential Tincture of Leptandra and Iris are truly splendid. I think by the use of them I can avoid the use of mercurials in many cases. I cured, by the use of Podophyllin, your Essential Tinctures of Iris and Leptandra, a liver affection, complicated with intestinal irritation, as it were, by magic, that had resisted the use of Blue Pills. Your Essential Tincture of Hyoscyamus I think equal to the Fluid Extract.

The Tincture of Lobelia seed is excellent; that of Stillingia is a strong preparation.

When your Essential Tinctures can be obtained at Philadelphia, I shall use them extensively. I think them superior to all other preparations. I am anxious to see Leptandra and Iris Versicolor held in just estimate by the regular profession. I think them in many cases equal to Mercury, without any liability to injury of the system. I wish you would soon prepare Essential Tinctures of Podophyllum and Euonymus. I regard such preparations as a desideratum at present. * * *

Yours, sincerely, —— ——

ECLECTIC MEDICAL INSTITUTE.

Chartered in 1845. *Whole Number of Matriculants*, 3106; *Number of Graduates*, 944.

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SIXTEENTH ANNUAL ANNOUNCEMENT.

This institution was chartered in 1845, and still continues to be the firm advocate of medical reform. It is confidently believed that no college in the United States gives a more thorough and satisfactory course of medical instruction, embracing, as it does, in the liberal spirit of Eclecticism, all of much value that belongs to any of the existing systems of medicine, and presenting much that is taught in no other medical college. The peculiar knowledge imparted in this institution is not the result of mere compilation from European authors, nor is it the result of a passion for mere theory and speculation; it is the result of original, accurate, and extensive observation, of zealous experimental researches, and of successful discoveries. The members of this Faculty speak not in the tame and doubtful manner of the mere book-worm; they are little disposed to be the mere passive instruments for the utterance of the opinions of others. They speak with certainty and precision of that which they positively know, and thus their instructions carry with them a vitality and force which can not be gathered from books, or from the instructions of the mere compiler. They aim to educate a superior class of practitioners, and they impart freely those methods of practice which they and their former students have amply tested during the last twenty-five years. The merit of these superior methods is annually displayed by the speedier relief which they afford in the ordinary diseases of the country, and by their singular success in cases esteemed incurable.

To build up the constitution of the feeble, to prefer a safe and sanative medication to harsh, dangerous and morbific treatment, and where possible to substitute constitutional treatment for surgical operations, should constitute the highest honor of the medical practitioner; and such are the characteristic features of the practice which has been introduced by its professors, and which they are now prepared to teach in an effectual manner.

They refer with pride and confidence to the practitioners whom they have heretofore instructed, and as their plan of operations and facilities are annually enlarged, they do not fear to refer to the future graduates of the Institute as practical demonstrators of the value of their instructions, and to declare that they hold themselves responsible for the rational and successful treatment of disease by the *alumni* of this institution.

What they have accomplished thus far in the way of sending forth well qualified practitioners, by their instructions, has been accomplished wholly by their individual exertions, unaided by governmental patronage. They have entered upon the field of exertion for medical honor with no stronger support than that which they have derived from their earnest conviction of the immense value of the peculiar knowledge which they impart; from their strong confidence in the public intelligence and discrimination; from the sympathy of numerous friends of medical improvement, and from their immovable resolution to accomplish the great undertaking of effecting a reformation in medical science, in which undertaking they believe are involved immense consequences to the health and happiness of mankind.

The professors who now constitute the Faculty are amply qualified to sustain the high character which the Institute already bears among those who have a personal knowledge of its style of instruction. Six of the nine members of the Faculty are graduates of the Institute, which may be regarded as a sure guaranty of a perfect familiarity with all the peculiar doctrines and resources of the Eclectic system of medicine; and with the exception of Prof. Jones, are all actively and extensively engaged in the practice of their profession.

THE SCHOOL.

The Eclectic Medical Institute building is located on the corner of Court and Plum streets, in the very center of the great Western Metropolis. The building is large and commodious, well adapted to the purposes for which it is used, is in good order, and well situated in every respect.

HOSPITAL FACILITIES.

Clinical medicine and surgery are taught by the professor occupying that chair, two days in each week, at Newton's Clinical Institute, on the corner of Sixth and John streets, where every exertion is made to initiate the student to the actual bedside practice of medicine. Here are collected a variety of diseases from all parts of the country, and the lecturer endeavors to explain each case so fully that the student can not fail to thoroughly understand its nature and mode of treatment. Many of the major operations of surgery take place in this establishment, where every student has an excellent opportunity of observing the mode of procedure in each case. Each student has access to the Commercial Hospital, and the same privileges as students from other Colleges.

MUSEUM.

Every exertion has been made to render the Museum interesting and satisfactory, and additions are being constantly made. Private collections have been added, and arrangements made with gentlemen engaged in the pursuit of the natural sciences, to secure valuable cabinets of specimens from all the departments of natural history. There is also an extensive materia medica cabinet.

TIME OF COMMENCING LECTURES.

The regular session will commence on Monday, the 15th of October, 1860. There will be daily preliminary lectures from the 1st to the 15th of October, at which time the Demonstrator's department will be open. The Spring Session will commence immediately after the close of the Winter Session.

EXPENSES.

Fees, including Matriculation, Tuition, Clinic Fees and Demonstrator's ticket, $85 ; Graduation, $25. The fees are cash in all cases. Board can be had from $2.50 to $4 per week.

REQUISITES FOR GRADUATION.

The candidate must be twenty-one years of age ; must possess a good moral character ; must have read medicine two years, and have attended two courses of lectures, one of which must have been in this institution ; or he must have attended three courses with intermediate reading ; or he must have practiced four years, and have attended one course of lectures.

TEXT-BOOKS.

Chemistry—Gregory's Chemistry by Sanders, Stockhardt, Fowne. *Materia Medica*—Jones and Scudder, Coe, Bickley, Pereira, American Dispensatory. *Physiology*—Draper, Dalton, Carpenter. *Theory and Practice*—Newton and Powell, Jones and Sherwood, Paine, Beach, Wood. *Surgery*—Syme's Surgery by Newton, Hill, Erichsen. *Anatomy*—Gray, Harrison, Wilson. *Obstetrics*—King, Meigs, Scudder, Beach, etc., etc.

INFORMATION.

Students visiting the city will call at the office of James G. Henshall, Secretary, No. 110 Sixth Street. Mr. Henshall will assist in getting them board, and furnish all other necessary information. Letters of inquiry may be addressed to him, or to the Treasurer, R. S. Newton, M. D., No. 90 West Seventh Street, Cincinnati, O.

Catalogue of Matriculants of the Winter Session of 1859-6 .

Abbott, C. H., Indiana.
Andrews, R. G., Illinois.
Arnholt, M. A., Illinois.
Arnold, M. B., New York.
Avery, O. W., Ohio.
Backesto, J. P., Missouri.
Bacon, A. J., Illinois.
Banta, W. H., Missouri.
L. Barnes, Michigan.
Barnett, E. E., Missouri.
Baxter, J. H., Kentucky.
Beeman, E. E., Ohio.
Blake, S. M., Vermont.
Bosworth, H. F., Ohio.
Bolton, R. L., Missouri.
Bolton, J. J., Missouri.
Bordwell, O. C., New York.
Bragg, M. B., Alabama.
Brown, I. N., Ohio.
Brock, D. S., Tennessee.
Caldwell, W. B., Missouri.
Card, J. C., Pennsylvania.
Casey, T. B., Tennessee.
Castle, W. H., Ohio.
*Castleberry, J. T., Mississippi.
Chafee, N. T., Michigan.
Chenoweth, J. T., Ohio.
Clark, M. M., Illinois.
Clingman, A. M., Arkansas.
Cobb, H. D., Michigan.
Cook, W. C., Tennessee.
Cole, A. W., Arkansas.
Cory, A. F., Indiana.
Cox, W. P., Illinois.
Crosby, D. H., South Carolina.
Cushing, E. N., Kentucky.
Daniels, C. P., Ohio.
Davis, B. R., Ohio.
Dawson, A. J., Texas.
Denbo, J. W., Indiana.
Dever, I., Ohio.
Dimick, H. S., New York.
Dubois, W. T., Ohio.
Duncan, A. E., Ohio.
Earle, E. L., Mississippi.
Eddy, R. P., Rhode Island.
Esten, S. W., Rhode Island.
Esten, E. C., Rhode Island.
Etheredge, H. S., Virginia.
Ewan, C., Indiana.
Ewing, D., Indiana.
Faloon. M., Indiana.
Farrington, A. S., Ohio.
Garner, L. S., Michigan.
Gatewood, V. B., Virginia.
Geddes, P. S. W., Massachusetts.
Goddard, J. H., Illinois.
Gould, A. W., Michigan.
Greenawalt, W. H., Pennsylvania.
Greve, T. L. A., Illinois.
Gwin, T. M., South Carolina.
Hamilton, J. L., Pennsylvania.
Hanson, J. W., Arkansas.
Hays, G., Indiana.
Haynes, J. R., Kentucky.
Hays, W., Indiana.
Heath, E., Kentucky.
Henshall, J. A., Ohio.
Hollingsworth, I. N., Mississippi.
Hopper, M. D., Kentucky.
Hoy, H. J., Ohio.
Jacobs, M. C., Missouri.
Jones, J. D., Mississippi.
Jones, R., Mississippi.
Johnson, W. P., Tenenssee.
*Johnson, C. W., Mississippi.
Kegley, M., Virginia.
Kelly, J. J., Ohio.
Kelley, A., Tennessee.
Kirkham, F. M., Iowa.
Lampman, J. C., New York.
La Rue, R. J., Kentucky.
Lewis, D. H., Tennessee.
Lyle, G., Ohio.
Masterson, J. S., Illinois.
McGehee, T. W., Mississippi.
McKinney, T. C., Tennessee.
McKinney, A., Ohio.
Medlock, B. S., Tennessee.
Mitchell, J. H., Missouri.
Mitchell, J. S., Arkansas.
Murphy, J. W., Indiana.
Moore, W. W., Mississippi.
Moorman, J., Ohio.
Norton, P. N., Missouri.
Orr, J. P., Ohio.
*Payne, W., Kansas.
Perry, E. C., Ohio.
Pettiner, M., Ohio.
Prichard, A., Kentucky.
Pruitt, J. W., Arkansas.
Pursley, G. A., Illinois.
Reichard, J. P., Maryland.
Reighard, J. D., Indiana.
Russell, D. P., Pennsylvania.
Riden, H. P., Georgia.
Rigg, C., Kentucky.
Roberts, P., Kentucky.

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*Attended three weeks only.

Gaskin, J., Ohio.
Sabin, M. E., Ohio.
Sawyer, A. R., Illinois.
Seay, G. W., Kentucky.
Sidwell, N. H., Ohio.
Simons, H. W., Pennsylvania.
Sharp, G. N., Missouri.
Shultz, J. B., Indiana.
Simpson, G. H., Tennessee.
Smith, L. W., Illinois.
Stone, T. C., Mississippi.
Spiegel, C. V. B., Tennessee.
Spencer, E. E., Massachusetts.
Stapleton, G. C., Missouri.
Stewart, C. M., Tennessee.
Stevenson, E., Tennessee.
Staton, L. S., Tennessee.
Strain, H. S., Ohio.
Surface, C., Ohio.
Smith, C. P., Ohio.
Tankersley, J. H., Mississippi.
Teague, W., Indiana.
Rodgers, C. F., Arkansas.
Thompson, J. H., Iowa.
Tillson, O. E. Z., Ohio.
Toskay, J. W., Ohio.
Travis, J., Tennessee.
Vinson, T. W., Mississippi.
Wallin, D. J., Kentucky.
Walling, G. H., Rhode Island.
Walden, J. B., Indiana.
Walford, R. A., Indiana.
Warren, D. J., Arkansas.
Weaver, H. L., Ohio.
White, H. B., Pennsylvania.
Whitford, H. P., New York.
Whitfield, F. M., Kentucky.
Wickens, L., Michigan.
Wilsey, F. D., Pennsylvania.
Whiting, J. S., Indiana.
Wildmon, W. T., Illinois.
Wilbur, W. L., Illinois.
Winters, E. M., Illinois.

RECAPITULATION.

Ohio	30	Rhode Island	4
Indiana	15	Virginia	3
Illinois	14	South Carolina	2
Tennessee	14	Massachusetts	2
Kentucky	12	Iowa	2
Missouri	11	Alabama	1
Mississippi	11	Maryland	1
Arkansas	7	Georgia	1
Pennsylvania	7	Vermont	1
Michigan	6	Texas	1
New York	5	Kansas	1
		Total	151

Graduates of the Winter Session of 1859-'60.

M. A. Arnholt., Jr., Illinois.
J. P., Backesto, Missouri.
D. S. Brock, Tennessee.
H. D. Cobb, Michigan.
W. H. Castle, Ohio.
A. M. Clingman, Arkansas.
A. F. Cory, Indiana.
I. Dever, Ohio.
R. P. Eddy, Rhode Island.
D. Ewing, Indiana.
M. Faloon, Indiana.
J. Gaskins, Ohio.
L. S. Garner, Michigan.
G. Hays, Indiana.
J. R. Haynes, Kentucky.
J. A. Henshall, Ohio.
R. Jones, Mississippi.
F. M. Kirkham, Iowa.
J. Moorman, Ohio.
J. W. Pruitt, Arkansas.
M. Pettiner, Ohio.
A. Pritchard, Kentucky.
C. Rigg, Kentucky.
J. P. Reichard, Maryland.
E. E. Spencer, Massachusetts.
C. M. Stewart, Tennessee.
E. Stevenson, Tennessee.
C. B. V. Spiegel, Tennessee.
J. B. Shultz, Indiana.
L. W. Smith, Illinois.
A. R. Sawyer, Illinois.
C. P. Smith, Ohio.
G. W. Seay, Kentucky.
J. H. Tankersley, Mississippi.
J. H. Thompson, Iowa.
R. A. Walford, Indiana.

A. Kelley, Tennessee.
J. S. Masterson, Illinois.
A. McKinney, Ohio.
J. W. Murphy, Indiana.
E. M. Winters, Indiana.
H. P. Whitford, New York.
H. B. White, Pennsylvania.
W. L. Wilbur, Illinois.

HONORARY GRADUATES.

John Travis, Tennessee.
William Hays, Indiana.
H. P. Ridon, Georgia.
H. Stiles Bradley, Georgia.

Catalogue of Matriculants of the Spring Session of 1860.

Anderson, J. C., Mississippi.
Anderson, R. P., Ohio.
Backesto, J. P., M. D., Missouri.
Barr, A. J., Missouri.
Barnes, L., Michigan.
Bartlett, T. B., Virginia.
Bradley, T., Canada West.
Brown, I. N., Ohio.
Bolton, R. L., Missouri.
Bolton, J. J., Missouri.
Blakey, T. C., Missouri.
Cameron, V. E., Indiana.
Carr, J. O., Kentucky.
Clark, A. L., Illinois.
Clingman, A. M., M. D., Arkansas.
Conklin, A. V., Ohio.
Crosby, D. H., South Carolina.
Curran, R., New York.
Dawson, A. J., Texas.
Day, D., Missouri.
Dyal, E. C., Ohio.
Edwards, W. B., Tennessee.
Ewing, J., Indiana.
Fenner, M. M., New York.
Fross, J. G., Michigan.
Gwin, T. M., South Carolina.
Gatewood, V. B., Virginia.
Heath, E., Kentucky.
Hollingsworth, I. N., Mississippi.
Houston, J. R., Indiana.
Hoy, H. J., Ohio.
Hunt, E. N., Mississippi.
Hutchins, R., Indiana.
Jones, J. D., Mississippi.
Jordan, J. P., Kentucky.
Kennedy, J., Indiana.
Kibler, R. C., South Carolina.
King, H. R., Ohio.
Lampman, J. C., New York.
Lee, W. D., South Carolina.
Lord, T. J., Indiana.
Luther, R. L., South Carolina.
Lyle, G., Ohio.
McLaughlin, J. B., Illinois.
Mitchell, J. B., Missouri.
Musgrave, P. D., Indiana.
Musgrove, J. W., Alabama.
Norton, P. N., Missouri.
Orr, J. P., Ohio.
Pearcy, J. W., Georgia.
Provine, E. M., Illinois.
Reighard, J. D., Indiana.
Rhinehart, J. L., Illinois.
Richardson, H. W., Illinois.
Robbins, H. C., Massachusetts.
Rupp, P. E., Ohio.
Scally, J. W., Mississippi.
Smith, C. H., Indiana.
Snedaker, J., Illinois.
Snyder, A. L., Ohio.
Stapleton, G. C., Missouri.
Truscott, W., Illinois.
Walden, J. B., Indiana.
Warren, T. A., Georgia.
Wood, A., Ohio.

RECAPITULATION.

Ohio	11
Indiana	10
Missouri	9
Illinois	7
Missisisippi	5
South Carolina	5
Kentucky	3
New York	3
Virginia	2
Georgia	2
Michigan	2
Alabama	1
Arkansas	1
Massachusetts	1
Texas	1
Tennessee	1
Canada West	1
Total	65
Winter Class	151
Total	216

Graduates of the Spring Session of 1860.

Anderson, J. C., Mississippi.
Anderson, R. P., Ohio.
Barnes, L., Michigan.
Barr, A. J., Missouri.
Blakey, T. C., Missouri.
Bolton, R. L., Missouri.
Bolton, J. J., Missouri.
Brown, I. N., Ohio.
V. E. Cameron, Indiana.
Carr, J. O., Kentucky.
Curran, R., New York.
Conklin, A. V., Ohio.
Crosby, D. H., S. Carolina.
Dawson, A. J., Texas.
Day, D., Missouri.
Edwards, W. B., Tennessee.
Ewing, J., Indiana.
Fenner, M. Marion, Michigan.
Gwin, T. M., S. Carolina.
Gatewood, V. B., Virginia.
Heath, E., Kentucky.
Hollingsworth, I. N., Mississippi.
Lampman, J. C., New York.
Lyle, G., Ohio.
McLaughlin, J. B., Illinois.
Mitchell, J. B., Missouri.
Musgrove, J. W., Alabama.
Orr, J. P., Ohio.
Pearcy, J. W., Georgia.
Richardson, W. H., Illinois.
Rhinehart, J. L., Illinois.
Scally, J. W., Mississippi.
Snyder, A. L., Ohio.
Stapleton, G. C., Missouri.

HONORARY GRADUATES.

S. T. Clark, Indiana.
J. G. Fross, Michigan.
J. J. Hall, Canada West.
N. Hopkins, Canada West.
W. W. S. Kelly, Missouri.

MEDICAL REFORM.

When we think how important the mission of the physician is—how much the community depends upon the skill and judgment of those who ought to be the dispensers of health-inducing remedies—how dear is every man's life—it would seem that common benevolence, Christian charity, and individual kindness, would induce those who have assumed the responsibilities of the physician to pause, lay aside their prejudices, and examine the claims of Eclecticism upon the attention of *all* who prescribe for the sick. Eclecticism asks only a trial, fair and judicious; and if it can not stand the tests of examination and application, let it give place to some other more correct system. Here is a system of practice which is founded on reason and the highest acquirements of other systems—a system which carefully examines every new principle, tests every new remedy, adopts the demonstrative facts and principles of all systems, and presents much to the physician unknown to the other schools—which, in short, courts investigation—which demonstrates its correctness by its successful results—and yet many practitioners turn a deaf ear to its merits. It would seem that physicians do not want to know the *best* means of curing disease. But young men, who have reputations to gain, are beginning to learn its worth, and we have an abiding faith that all the sects must soon give way to the onward march of this republican and rational system of medicine.

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MEDICAL AND COLLEGE JOURNAL.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*Fractures of the Condyles of the Humerus.* By Prof. A. J. HOWE.

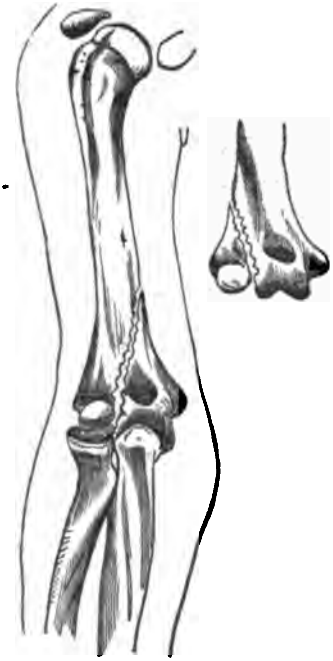
The lower extremity of the humerus being flattened into an irregular plate to articulate with the radius and ulna, is not favorable in form to resist fractures. Add to this disparagement the great violence frequently brought against the condyles by a fall upon the elbow, or the force communicated through the radius to the external condyle by a fall upon the hand, and it will be easily understood why this part of the humerus is so often broken.

The elbow is subject to such a variety of lesions—some being complicated, and all rather obscure—that a discrimination of the existing injury, in a given case, requires considerable diagnostic acumen. In scrutinizing the bones entering the joint, after an injury has been received, the surgeon having ready in mind a clear understanding of the fractures and dislocations peculiar to the region, generally proceeds to an investigation of the case in one of two ways. He either examines at once the parts oftenest injured, and those afterward which more rarely suffer; or he investigates the structures more methodically by first noting what parts are sound and in place, leaving the more obscure diagnostic points till later in the examination. To follow the latter plan, he closely observes the contour of the arm, and, for support and rotation, holds the wrist of the suffering limb in one hand, while with the other he carefully manipulates the prominent parts. A finger is slid along the ulna to determine its continuity, the olecranon process being particularly scrutinized. Not that there is a probability of fracture of the olecranon—an injury which seldom happens—but being occasionally broken, a search for the lesion may constitute a beginning in the business of forming a diagnosis after the plan now in view. A dislocation of both bones of the forearm backward, the coronoid process having been broken off, constitutes, perhaps, the second injury in the order of unfrequency in lesions of the elbow. No doubt, however, could arise in relation to the nature of the injury, for the deformity occasioned by the displacement is so great and characteristic that no one at all acquainted with the anatomy of the arm, could fail to recognize the true state of the facts. Of the injuries of the elbow, to be reviewed in this way, five may be included. Two have already been spoken of, and three (the most obscure) remain to be noticed. The least frequent of the three is, probably, fracture of the *internal* condyle. This lesion is rare; some surgeons, among whom is Malgaigne, declaring that they never have met a case. As there are several specimens of the humerus, bearing well-marked indications of fracture of the inner condyle, one of which is in my possession, there can be no doubt in regard to the *possibility* of the injury. The diagnosis of fracture of the internal condyle, as has been intimated, is not easy, yet it can be satisfactorily obtained. The history of the injury, when it can be had, may throw light on the case. If the patient received the hurt by a fall on the elbow, it may be presumed, at least, that the *inner* condyle has been broken, for this part of the humerus is rarely fractured in any other manner. As is well known, the motion of the elbow is that of a hinge-joint; but after a fracture of either condyle, *especially the inner*, lateral motion can also be produced if the upper arm be held steadily, and the forearm swung in the two directions opposite those natural to it. This increased and peculiar mobility at the elbow is strongly diagnostic of fracture of the internal condyle. By bending, rotating, and twisting the limb, certain angular deformities can be produced, and *crepitation elicited*. Much displacement of the broken condyle need not be expected if the arm is placed in its natural position. The muscles—the flexors of the fingers—arising from it, by the direction of their action, may rotate the fragment a little, but do not carry it out of place. The awkward aspect of the elbow may lead the unwary to pronounce the injury a dislocation of the ulna; but who ever met such a difficulty? In dislocation of both bones of the forearm backward, the arm is quite rigid, much more so than after fracture of the internal condyle; and it takes great power to reduce the displaced bones, and when once adjusted they will stay in place. In case of fracture a little force serves to bring the arm into shape, yet as soon as the power is relaxed the deformity is reproduced.

Last winter, Prof. Sherwood called me to see a case that had come into his hands for treatment. An Irishman, while struggling along with a heavy sack of coal on his back, fell to the ground, striking his elbow against some projecting point. The joint soon swelled considerably, and was very painful. The natural motions were somewhat impeded, but if the upper arm were held firmly while the forearm was carried in various directions, it could be distinctly seen that more general mobility resulted than that peculiar to a hinge-joint. Crepitation could be elicited, and those awkward distortions of the arm produced, such as only can be when the condyles are broken. The olecranon was continuous with the ulna; in other words, it was not broken, nor did it project backward like the os calcis, making the elbow resemble the heel, as those parts would if there had been a dislocation of both bones of the forearm. Neither was there that great rigidity which accompanies a luxation of the radius and ulna backward. The external condyle was not broken, but could be distinctly felt, as connected with the shaft of the humerus, moving with it. The head of the radius was dislocated forward, and *the internal condyle broken.* If the shaft of the humerus was held firmly, and the inner condyle taken between the thumb and finger and rotated, there was no difficulty in seeing and feeling that they were not a unit.

Dislocation of the head of the radius, uncomplicated with fracture, is not uncommon. It is an injury which occurs oftener than a break of the internal condyle; yes, more often than all the three injuries just mentioned, counted together.

The dislocation is generally caused by falls upon the hand when in extreme pronation or supination. Violent muscular efforts of a twisting or wringing character, might produce it. A careful examination of the elbow-joint generally reveals the nature of the accident. The head of the radius will be found out of place, and the cup-like depression in its end can be distinctly felt if the finger be pressed into its cavity. The arm is quite rigidly held in a state of pronation or supination. The displaced bone can be returned to its place if it be dislocated backward, by pronating and extending the forearm with considerable force, pressing the radius into position with the thumb; if the dislocation be forward, the forearm must be supinated and flexed. When the bone is once returned, it will not readily slide out of place, unless submitted to the same forces as at first produced the luxation.



The design of this diagram is to represent fracture of either condyle of the humerus. The figure on the *left* shows the bones entering the elbow-joint, and a fracture of the *internal* condyle. The figure on the *right* represents the lower extremity of the humerus, with fracture of the *external* condyle. Anterior views. (Original.)

Fracture of the external Condyle.—This is by far the most common injury that befalls the bones entering the elbow-joint. When a person gets a fall, the hand is thrown out to break the force of it and to protect the trunk. The violence received by the hand is transmitted through the wrist to the radius, which in turn communicates it to the external condyle of the humerus. Now, if the force be very great, a fracture is produced through the lower extremity of the radius—called Barton's (see *College Journal*, vol. iii, page 172)—or, this bone withstanding the shock, the external condyle against which the radius articulates at the elbow, is chipped off. A glance at the anatomy of the arm reveals these weak and exposed points. The lower extremity of the radius spreads out like a condyle, and is therefore liable to be fractured, especially if the hand, when it receives the shock, be turned out, or to the ulna side. The force is not then received in a line parallel with the bone, but obliquely, and therefore chips off the inner projection of the lower end of the radius. If the force be received on a line parallel with the radius, it is transmitted without injury to the external condyle which breaks. If, as has been previously stated, the hand receive the force when much pronated or supinated, and a fracture of the radius do not occur, a dislocation of the head of the radius results.

I have been thus particular in calling attention to the injuries to be expected from a fall upon the hand, because they are common, and not, in my opinion, sufficiently explained in surgical works.

The diagnosis of fracture of the external condyle is generally not difficult. There will be swelling, pain, want of voluntary motion, but increased mobility. Crepitation can be elicited by fixing the humerus and rotating the forearm, the prominences of the elbow being held between the thumb and fingers to detect the grating occasioned by one fragment rubbing against the other. Little deformity exists when the arm is placed in a natural position, but when the limb is bent at an unusual angle it will be seen that the elbow takes on distortions not usual to it. The condyloid fragment is not much displaced, a slight twist caused by muscular action being the only displacement observed.

The short, fat arms of children, whose joints are very mobile, when injured at the elbow, are not easy to diagnose. I was once puzzled with a case. A child about five years old, had its elbow caught in a gate that was blown together. I saw the limb some hours afterward. It was severely contused, swollen, painful, and somewhat paralyzed so far as motion is concerned. The mobility of the joint being great, the voluntary motion lost, and while moving the arm the shrieking of the child was so characteristic of fracture, I could not avoid suspecting that some bone had been broken. However, as crepitation could not be detected, and that degree of angular deformity at the elbow produced which is characteristic of fracture or dislocation, I declared that neither of those lesions existed; and my diagnosis, in a few days, when the swelling had subsided and the functions of the joint had been fully restored, proved to be correct.

The little prominence of bone which constitutes the extremity of the inner condyle—sometimes called the epitrochlea—is reported as having been broken, no other injury having been done to the structures about the joint, but I have not met a case that I was certain about.

In young subjects it is possible that the epiphysis of the lower extremity of the humerus may become separated from the shaft of the bone, the injury being equivalent to a transverse fracture through the expanded plate which spreads out for articular purposes at the elbow. Crushing violence may produce any kind of a fracture, rendering it compound, comminuted and complicated.

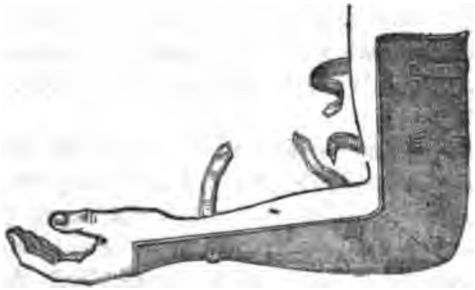
More suits to recover damages on the ground of alleged mal-practice, after fractured condyles have been treated, than arise from any other injury. In fact, few physicians will undertake to treat a fractured condyle without a guarantee on the part of the patient and his friends that they will not commence a suit in case the elbow is stiff, or any other defect remains.

As the dangers of partial or complete ankylosis after fracture running into a joint, are so imminent, it is well for the surgeon to explain to the patient, in the presence of competent witnesses, the nature of the injury and the obstacles in the way of a perfect result. The explanation is particularly necessary to correct a prevalent error among the ignorant, that a medical man can and ought to so adjust a fractured bone, once for all, as to insure a union perfect in every respect.

While I would impress upon every practitioner the importance of fortifying himself against vexatious law-suits, I am not disposed to sustain in mal-practice every adventurer in the responsible art of bone-setting. There is reason to believe that certain state and county societies and combinations of medical men, are gotten up more for the purpose of *cloaking* professional faults and blunders, than for the advancement of humanitary schemes. Members of such associations talk unceasingly about *the interests of the profession*, as though they were identical with the great truths of science.

Treatment.—The diagnosis having been distinctly made out and a guarded prognosis given, the displaced parts are to be adjusted preparatory to the dressing. It may be remarked, for those unacquainted with such injuries and are inclined to give every limb supposed to be fractured a *severe pulling* before it is dressed, that in simple fracture of a condyle, unaccompanied with dislocation, very little displacement exists; therefore extending and counter-extending forces would be entirely unnecessary and cruel.

Another suggestion may not be inappropriate in this place. Let no practitioner who attempts to manage fractures, neglect, through sympathy, indecision or ignorance, to handle the injured limb sufficiently to establish a correct diagnosis. Grasp the patient's wrist with one hand and make moderate extension and rotation, while with the other the elbow is manipulated for the purpose of adjusting any displacement, and determining when the limb is ready to receive the dressing. All this having been accomplished, it is well to place a bandage on the arm, beginning with the roller at the hand and continuing it upward until the entire arm is lightly enveloped. This bandage is not absolutely necessary, but it holds the muscles steady, tends to obviate swelling, and serves as a cushion on which the remaining dressing is to rest.



This diagram represents the arm resting in a trough *splint* or apparatus made of woven wire, a kind of material much used at present for dressing fractured limbs.—(Original.)

To complete the dressing, an angular trough of woven wire constitutes, perhaps, the best retentive apparatus that can be used. It answers all the purposes of the angular carved splints, and at the same time allows of free ventilation. As woven wire splints are now familiar to the profession, a description of them is not necessary.

After the fifteenth day, the arm is to be taken from the splint every day, and the elbow gently exercised in flexion and extension, to obviate ankylosis. After the twentieth day—a time when the osseous reparative material begins to be supplied—the passive motion should be practiced twice a day. At all other times, the arm may rest in the wire trough until the fragments are sufficiently united with the bony matter to be out of danger of displacement.

Instead of a wire apparatus, pieces of a cigar-box or splints of thin board may be laid upon the first or enveloping bandage, above and below the elbow (bent to a right angle), and these held in place by the turns of a roller. I have often dressed the arm in this way, commonly using a bent piece of pasteboard on the front part of the limb. Thick pieces of pasteboard or strips of sole leather, wet and molded to the arm, constitute excellent splints.

The seat of the injury may be kept wet with whisky or an anodyne fluid. The application performs a double office. It serves to keep in check a too high grade of inflammation, and to assure the patient's mind that all is being done which well can be.

At the end of four or five weeks, when the dressings are thrown off, considerable rigidity in the elbow-joint may be expected, even if ankylosis proper has not taken place. The fore-arm, too, may have its usual rotation restricted. To restore normal motion and pliability to the limb, the patient or his friends must, several times a day, put the arm through all its customary movements.

I have never failed to secure free motion of the elbow-joint after fracture of the condyles, except in one instance. In the exceptional case, several fragments of the lower extremity of the humerus had been produced by a crushing force. Some motion was preserved in this case, even enough to allow the patient to carry his hand to his face and into his pocket. I have seen cases of ankylosis more or less complete, that resulted in other hands which undoubtedly were as dexterous as mine.

A great deal can be accomplished toward restoring the natural motion to the joint, even several months after the healing process had been performed. The forearm is to be held firmly flexed for a few minutes, and then extended in the same manner, repeating the process two or three times a day. The pressure excites absorption which removes the extraneous bony and other matter thrown out in the process of repair. Efforts to improve the condition of a partially ankylosed limb should not be relaxed for several months, or till all is accomplished that may be.

For fractures about the elbow, surgical writers usually advise that the limb be dressed with the joint at different angles, to obviate stiffening. Splints jointed with a hinge—some of which are figured with a screw to change the angle at will—have been recommended. In practice, I have never found any advantage to arise from these complicated contrivances, and believe that they tend to detract from the importance of performing passive motion during the healing process.

Art. II.—*A Case of Chronic Laryngitis.* By Prof. H. D. Garrison.

Mr. Henry S——, aged 38, a book-binder by trade, was attacked in August, 1850, with catarrh, giving rise to the usual symptoms; all of which soon subsided, except a soreness at the throat, cough, and slight hoarseness. To allay these unpleasant symptoms, he, for three years, continued to take various cough mixtures, syrups, balsams, etc., as prescribed by physicians and suggested by friends, but without relief. In 1853, a severe paroxysm of coughing, together with some physical excitement, was followed by hæmoptysis, which, though alarming to him, was probably not very serious.

In accordance with the advice of Drs. S. and J., in whom he then had great confidence, he passed the winter of 1853-'4 in Cuba. So far from being benefited by this southern tour, he was *injured in every respect.* The hemorrhage recurred in an aggravated form, and the cough increased. On returning, in the spring of '54, he sought assistance at the hands of Drs. H. and M. These gentlemen, after treating him individually and conjointly for eighteen months, told him that *another southern tour* would surely *restore* him to perfect health, and insisted that he should go. Accordingly, in the fall of '55, he took passage for New Orleans, but had no sooner arrived than the hemorrhage broke out with tenfold its former malignancy. The cough was proportionally aggravated. All hopes of recovery were of course blasted. He survived the winter, and in the ensuing spring, managed to return, weak, emaciated and disheartened, to his friends in this city. On his arrival here, he was again attacked with hemorrhage, which was promptly checked by Prof. Newton.

From this time until the spring of '59, he plied himself diligently in testing, *in propria persona*, all the cough medicines extant, including the pseudo-specifics, cod-liver oil, hypophosphates and hypophosphites; but all without benefit. In the meantime, he spent one winter in Keokuk, Iowa, where the cold and variable weather was against him, but not so much as had been the warm air of the south.

In the summer of '59, he visited a friend in northern Ohio, near Lake Erie. While in that delightful locality, his health improved beyond his most sanguine expectations. So remarkable, indeed, was the improvement, that at the end of a few months, he, somewhat rashly, determined to return and resume employment. On returning, however, his cough became greatly aggravated, and so continued until the 10th of March, 1860, when the case came into my hands.

On careful examination by auscultation and percussion, I could detect no lesion or abnormal state of the lungs. The thorax was somewhat contracted and distorted by the previous ten years of coughing, but not more than would be expected from this cause. Forcible pressure, and even blows, upon the thorax gave no pain, nor had there ever been, according to my patient's statement, pain in the lungs, although many physicians had unhesitatingly pronounced the case consumption from the beginning. The larynx was very tender, even painful, upon pressure, and gave rise to a titillation which provoked coughing repeatedly. The expectoration was of the glairy muco-purulent character, and occasionally contained small white specks of caseous matter, which I, in accordance with the views of Dr. Green, assumed to be excreted from the follicles in and about the larynx, and not from the lungs. The uvula was quite long, and hence I excised it at once.

On account of frequent hemorrhage in this case, and the long standing of the disease, I had but little hopes of effecting a permanent cure, but consented to try. Accordingly, I prescribed to mitigate the cough:—

℞.—Tr. Sanguinariæ.
" Lobeliæ.
" Opii, *aa* ℥ ss.
Syr. Limonis, ℥ iij. M.

Take a teaspoonful, three or four times a day.

To invigorate the system so as to heal the throat, I ordered the following:

℞.—Pulv. Cort. Cinchonæ flav.
" Euonymi Amer. *aa* ℥ ij.
Acid Sulphurici, f ʒ ij.
Aquæ Pluv., O ij.
Coque et cold.

Take two thirds of a wineglassful, three times per day.

Over the larynx and the superior portion of the trachea, I applied the Ol. Tiglii and the Eclectic Irritating Plaster. I used the probang, charged with a dilute sol. of argent nit., about twice per week, introducing it as far as possible into the larynx. Under this treatment, my patient improved rapidly. In six weeks from its commencement, he could walk four or five miles without feeling but little fatigue, and the cough was diminished more than one half. This course of treatment was continued, with about the same measure of improvement, until about the first of May, when, owing to a sudden and violent change in the weather, my patient contracted a severe cold, which speedily induced pleuro-pneumonia, from the effects of which he never recovered. In fact, as soon as the more prominent and distressing symptoms of the pleuro-pneumonia were arrested, the symptoms of incipient phthisis pulmonalis appeared.

From this time until the final dissolution of the patient, the usual symptoms of tubercular consumption obtained, modified only by the usual palliative treatment.

This case presents several points worthy of the notice of every practitioner.

1. The persistence of the throat disease (laryngitis) and the cough, through a period of ten years.

2. The injury sustained by going south, and the benefit derived from a tour to the lakes.

3. The improvement effected (mainly, as I believe) by a tonic course of treatment.

As no *post mortem* examination could be obtained, it is impossible to conceive what was the exact condition of this man's throat at death, but from symptoms gleaned some days previous to his demise, I inferred that the entire larynx and part of the trachea were deeply ulcerated and suppurating freely.

Office, 597, *Central Avenue*, *Aug*. 4*th*.

ART. III.—*Dropsy*. By W. G. BRUCE, M. D.

I believe that it is generally conceded by modern pathologists, that dropsy is but a manifestation or symptom of some other disease. It originates in a greater effusion of serum by the capillaries than the absorbents are able to dispose of; hence we find it exhibiting itself most frequently in persons who are debilitated by other diseases, intemperance, etc.

Dropsy first manifests itself in the cellular tissue, serous and other membranes similar to it in character, such as the lining membrane of the arteries, etc. We always find dropsy attended, either with some local disease or some derangement in the blood, the specific weight of which diminishes in the same ratio that the malady increases; the amount of serum augments, while cruorine, albumin and fibrin decrease. The blood seems to lose its power to coagulate, either entirely or in a very great degree, and seems disposed to die. We find the temperature of the surface decreased. The skin assumes a wan, discolored, cachectic appearance. The morbid products that take the place of the normal constituents of the blood have been found to consist of different proportions of water, albumen, osmazone and salts.

Changes of an alternating character take place in the other secretions. The skin is drier, the urine more scanty, and not unfrequently contains large quantities of albumen. In cases of hydrothorax, caused by, or rather a sequela to scarlatina, the urine has been found to be mixed with cruorine; and in hydrothorax, caused by derangement of the liver and spleen, we find the urine to contain large quantities of urea and uric acid.

The pressure upon organs, caused by the water surrounding them, gives rise to symptoms characteristic of dropsy. In dropsy of the chest, the breathing is obstructed; in dropsy of the membranes investing the heart, the motion of that organ is retarded; in dropsy of the abdomen, the organs of digestion are thrown into a state of general derangement.

Upon autopsical examination of the dropsical subject, the following characteristics are revealed: The organs are suffused with the abnormal secretion; the water is sometimes found clear, though at other times it may appear purulent, milky, or turbid; at other times, again, it may contain thread-like flakes; or animalculæ may be present. There is an alteration of the serous membranes, thus: If inflammatory symptoms have prevailed in the disease, they are found to be very much thickened; while in dropsy of a sluggish, inactive character, they are found to be thin; to lose their clear or transparent appearance, and to differ from the healthy serous membrane, inasmuch as they are found to be extensively ramified with numerous blood vessels which are not visible in the healthy membrane. All of the veins, especially those of the diseased organs, are usually distended with blood and serum. There is usually a destitution of adipose matter, its place being filled by water. This wasting away of the fatty matter commences at the outside and goes toward the center, as may be observed in the cellular tissue, where is seen in the center of every cell a nucleus of fat encompassed by water. This fact is very clearly illustrated in the muscular tissue, in which case the organs affected lose their tumid appearance, and by degrees assume a yielding character. Great alteration takes place in the supra-renal capules. They increase in size, and generally relapse into that state which they were in during fœtal life. The changes wrought upon the lymphatic vessels are either very slight, or else there is no change at all. The most apparent changes are found in the veins.

The commencement of dropsy is unattended by any appreciable changes of the general organism. When it arises from a badly managed case of measles, small-pox, scarlatina, or other exanthema, or from acute rheumatism, *fever* is liable to come on, especially when the patient is young. Frequently when dropsy is a sequela to scarlatina, a simple phlogistic fever supervenes, but which, in the course of the disease, assumes a torpid type. This fever, however, must not be confounded with another, which occurs in the course of the disease, and which is the harbinger of death. The leading symptoms of the latter fever are, small pulse, generally quick, wiry, and seem to be empty; tongue dry and parched; delirium sets in; patient becomes stupid, and death speedily closes the scene. It not unfrequently happens that dropsy is attended with a derangement of the nervous system. This may occur in any of its forms.

We most frequently find dropsy in persons approaching the decline of life. It seems that males are more predisposed to dropsy of the chest; females to that of the abdomen. Dropsy of the head, I think, is more prevalent among males than females.

The causes of dropsy are various. Not unfrequently such medicinal agents as are frequently made use of by physicians of the Allopathic school in their treatment of acute forms of disease, are secondary causes of dropsy, in consequence of their depletive and prostrating influence exerted upon the general system. Exanthematous disease, hepatic derangements, etc., may be added to the list of mediate causes of dropsy.

Dropsy not unfrequently terminates in recovery, even when the disease has raged with considerable violence. In dropsy of the abdomen, the crisis at times consists in a thin, watery diarrhea; in dropsy of the chest, in large quantities of mucous expectoration from the lungs, bronchia, etc. Unless the water can be discharged by the natural emunctories, as it usually is, it will find its way out of the system through some artificial passage, as in dropsy of the abdomen by the umbilicus; in anasarca, by the skin.

The practitioner should be very guarded in his prognosis of dropsy. If fever be present, the prognosis is rather more unfavorable than when the disease is not thus complicated. Where dropsy is complicated with a low, sluggish fever, the prognosis is extremely unfavorable. The shorter the disease, the greater are the chances for recovery; if, on the other hand, it has run a long course, the chances for recovery are greatly diminished. The prognosis also depends upon the conditions of adjacent organs; if they are deranged, their derangement will become complicated with the disease, and the danger is thus augmented. Dropsy arising from any mechanical cause, as loss of blood, etc., is attended with less danger than where it arises from other and malignant diseases. *Age*, too, has a great influence in dropsy. If the patient is aged and quite feeble, the disease is very apt to terminate fatally.

The *treatment* which I have found most successful in dropsical disease, without regard to its locality, is as follows:—"1st," as Dr. I. J. M. Goss remarks, "excite the depurating organs to an active discharge of their functions; 2d, give general tone to the whole system, increasing the nutritive properties of the blood, both by food and ferruginous medication; or, in short, to restore the lost balance between secretion and depuration, and restore the stasis of the blood."

To fill these indications, *diuretics*, or that class of agents having an immediate and especial action on the kidneys, are to be relied upon chiefly. To get up an energetic action of the kidneys, I use the following:—

℞.—Spiritus Juniperi Comp.
Acetum Colchici, *aa*, f ʒ j.
Tinctura Cantharidis, f ʒ ss. M.

Dose—One half teaspoonful, given as often as the urgency of the case seems to require it.

Eupatorium purpureum, in infusion, drank freely, with the oil of juniper, and tincture of digitalis in as large doses as can be borne by the patient, has been recommended, and may be very useful; but it seems to me that digitalis, if we would derive the greatest good from its use, should not be given in small doses.

If the treatment recommended above, should fail to remove the effusions of serum, the patient should be repeatedly given large doses of acetate of ammonia, and should be allowed as much exercise in the open air as is consistent with his strength. A very annoying circumstance to the practitioner during his treatment of dropsy, is the continual recurrence of the disease—continual reaccumulation of serum. To prevent the further accumulation of this fluid, chalybeated and vegetable tonics are to be resorted to. I have used the following, with the most gratifying results:—

℞.—Prussiate of Iron,
Hydrastin,
Dorstenia Contrayerva, *aa* ʒ ss. M.

Div. in powders No. xx.

Dose—One powder, morning and night.

I have found this an admirable preparation to restore the normal constituents of the blood, and keep up the vital forces.

To excite biliary secretion, I use the following pill:—

℞.—Podophyllin, grs. v.
Leptandrin, ʒ ss.
Ext. Taraxici, q. s. M.

Ft. Pil. No. xx.

Dose—One pill daily, till the bowels are freely moved.

Hydrocephalus and hydrothorax are forms of dropsy which are very difficult to treat successfully. Indeed, unless the treatment for these modifications of the disease be commenced in their earliest stages, the chances of cure are very rare.

The first indication in hydrocephalus, is to act upon the organs of secretion, as in other forms of serous effusions. The practitioner should bear in mind that eutrophics, as well as diuretics, should be employed in this form of dropsy. In my practice, I have found the following to be of eminent service:—

℞.—Potassii Iodidi, ʒ ij.
Ferri Iodidi, gr. x.
Syr. Stillingæ Comp., f ℥ iiij. M.

Dose—One teaspoonful, three times daily.

As a diuretic, I use, as a general thing, the compound spirits of juniper, vinegar of cholchicum, and tincture of cantharidea, as above. I have always found it to answer the purpose admirably.

In hydrothorax, such agents are required as have an especial action on the secretory functions of the kidneys. For this purpose, I have, in a number of instances, used the following hydrogogue preparation, much to my satisfaction:—

℞.—Jalapæ Pulv.,
Potassæ Bitártras, *aa* gr. xx.
Gambog.,
Zinzib. pulv., *aa* gr. v. M.

Div. in charlatula No. v.

Dose—One powder, three times a day, till the bowels are moved.

I must here repeat, that I have found this an admirable compound. It increases the secretion from the lining membrane of the bowels, and at the same time greatly facilitates their peristaltic action.

Marston's Mills, Mass., 1860.

ART. IV.—*Spermatorrhea.* By RICHARD CURRAN, M. D.

Hitherto, in all that has been written and gazetted upon this subject, the student and professional reader must have been alike struck by the vague and disjointed manner in which authors have described this and similar diseases of equal importance. Empirics, it is true, have written and disseminated pamphlets to the afflicted and non-professional, the aim of which seems only to have been to picture, in the gloomiest colors, the most frightful symptoms of this peculiar disease, without at all speaking of its true nature, much less of its treatment. Nothing like a scientific and practical arrangement of the diversified symptoms which present themselves, has been attempted. Hence the general and loose character of the advice which they affect to extend to the unhappy sufferer, and hence the inefficiency of these treatises as guides to successful treatment.

In numerous instances, where we are called upon to treat this disease, if we take the trouble to inquire into the previous history of the patient, we will discover that it is not the simple loss of semen alone, but the reading of circulars already adverted to, that produces the low hypocondriacal condition in which we usually find persons thus afflicted. Again, in many of the so-called seminal emissions, we are led to suppose that the continual moisture or dribbling from the urethra, which is said to be present in this disease, is no more than an abnormal excretion from the prostrate or Cowper's glands, as the result of gonorrhea or some other previous irritation; and it may also account more or less for the many cures which the charlatans boast of producing.

In the following treatise, we will try and arrange, under two stages, the most prominent symptoms present in this disease. The manner, however, may seem incorrect, for the symptoms in the second stage are very similar to those of the first, the only difference being in their intensity.

First Stage.—In this stage, the disease is principally confined to the genital organs, although there may be considerable constitutional disturbance. The involuntary emissions occur generally during the night, particularly if the patient is in the habit of lying on his back. In leaving his bed, the patient feels very much exhausted, and finds that he has perspired much during the night; his limbs are weak and trembling, and his appetite for the morning meal seems blunted. The nocturnal emissions may occur three or four times a week. The mind is often very much enfeebled, and the memory much impaired, particularly in its capacity to remember names; the eyes have a meaningless stare, and the whole countenance assumes a vacant look. Emaciation takes place, although in some instances the patient may have a voracious appetite. His walk is generally very irregular, and any active exercise produces great weakness. Vertigo and tinnitus aurium are not unfrequently present. The bowels are almost always constipated, and the patient has generally dark semi-circular spots under the eyes, which is a true mark of much exhaustion. Frequent flushes of heat pervade the cheeks, especially when in company with the opposite sex. The bougie, when introduced into the urethra, inflects more or less pain in and about the neck of the bladder. The semen is also much thinner than is natural, and scarcely possesses the characteristic odor. It may be said, however, that there are many persons who, possessing a robust and vigorous organism, can endure emissions of the above nature for a long term of years, without materially affecting their health.

Second Stage.—In the second stage, not only the organs of generation are affected, but the entire bodily functions are, to a great extent, disturbed.

In this stage, the voluntary emissions may occur day and night. So relaxed have the genital organs become, and so insensible to the passage of semen, that on arising in the morning he discovers the linen to be saturated with a thinner but a more copious discharge than he had been previously in the habit of emitting. He also wonders why it is that he has not those voluptuous dreams, although the latter are by no means absent; still they are not so frequent or necessary to the passage of semen. A light yellow discharge or stain is left on the linen. The nocturnal emission may take place every night, and the diurnal emission take place during defecation, which is known by the excessive weakness that usually follows. The firing of a gun, or any unexpected noise, will cause him to start up suddenly. Cowardice is generally a consequence of onanism—an utter disgust to society, and a disposition to be alone.

Lumbago and a dull, heavy pain, occur along the course of the great ischiatic nerve; and dull pains at the posterior portion of the brain, said by some to arise from the cerebellum, which is no doubt the case. Rheumatism of a metastasic character is always present, affecting principally the knees and heart; the latter is apt to result in ossification or organic disease. Symptoms of dyspepsia are invariably present. If the patient practices masturbation, the emission gives him not the slightest pleasure, but, on the contrary, a disagreeable and disgusting sensation often follows. It frequently happens, also, that the patient commits onanism while asleep, and so deadly a hold has the practice got of him, that the only way he can prevent himself from committing this somnambulistic act is to tie his hands. Despondency, and the suggestion of self-destruction, is often presented to his view. The mind is always absorbed upon the idea of his wretched condition, and power to concentrate his thoughts for any considerable length of time is impossible. The memory in this stage of the disease is very much impaired, and the patient, if he undertakes to tell a story, often forgets what he was going to say. Persons laboring under this disease have usually a great desire to sleep; still on retiring, they find it impossible to rest comfortably, and generally lay awake the greater part of the night. Catarrh or bronchitis, or perhaps both are liable to set in toward the middle of this difficulty.

On examination with the bougie, the urethra, as in the first stage, manifests great sensibility, and frequently resists the instrument so strongly that it is impossible to pass it. The bladder is irritable, and will retain the urine but a short time. The vesiculæ seminales have become indurated, and so irritable that the slightest nervous impression will cause them to contract and expel their contents. The testes may dwindle away, and the penis become small, and cord-like to the touch. The spinal marrow is very sensitive, and the cerebellum is the seat of a dull, heavy pain. The patient, by neglect of himself, or by false modesty—which, unfortunately, is too often the case—neglects seeking professional treatment until he is completely destroyed; the body and mind are in ruins. The secretion at this time from the generative organs is a thick, ropy and glossy-like fluid, having none of the characteristics of semen. Finally, he is hurried to a premature grave, either by consumption, epilepsy, insanity or apoplexy.

Causes.—There are numerous causes by which this disease is produced. Chronic inflammation and enlargement of the prostrate gland, ascarides, hemorrhoidal tumors, fistula, fissure, stricture, or any other source of irritation about the rectum, will aid in producing this disease. We think, however, that the most fruitful cause is, onanism or self-pollution.

Treatment.—First of all, the patient must be admonished with respect to diet, exercise, hygiene, etc.; and it is useless to say that a strict fast must be imposed on all venereal indulgence, for, without this, all efforts to effect a cure will prove abortive.

The medicinal agents recommended in this disease are numerous. The following are the most prominent:—

Anaphrodisiacs, now in use—Bromide of Potassium; Conium Maculatum; Camphor; Garden Sage.

The catkins of the Salix Nigra, made into a decoction, and taken freely, are said to be of "permanent importance."

Lupulin and Belladonna: A pill composed of ½ gr. of the Ext. of Belladonna to 10 grs. of Lupulin, taken three times a day, will be found, in the majority of cases, to be all that is necessary.

In this the Belladonna quiets the irritation of the neck of the bladder and adjacent parts, while the Lupulin exerts a peculiar influence over the nervous system, quieting the nervous irritation and destroying the venereal appetite.

The Bromide of Potassium answers a very good purpose; and, in fact, any of the agents mentioned are capable of curing the disease, in conjunction with other measures—*i. e.*, the Irritating Plaster to the spine. Tonics of a sustaining character are of vital importance, and must not be omitted.

Prof. Newton's Pill for Spermatorrhea, is composed of Bromide of Potassium, Camphor and Sulphate of Morphia.

PART SECOND.

SELECTIONS.

Immense Anal Prolapsus—New Operation—Cure.

This case was presented by Professor Hamilton, at the Penitentiary Clinic, December 7. An Irish lad, named Quin, aged twenty, pale and feeble, with great muscular relaxation, has been tormented with prolapsus for a long time.

The protruded mass was of an exceedingly florid color, and of the shape of a truncated cone. The ordinary length of the cone was full four inches; the base, resting upon the integument, was ten and a half inches in circumference. The truncated extremity was about an inch in diameter.

After a careful and repeated consideration of all the circumstances of the case, it was determined to yield to the entreaties of the patient, and incur the hazards of the following operation:—

The bowels having been thoroughly evacuated, and an injection of warm water containing a drachm of laudanum administered, he was directed to effect a medium protrusion. Placing him upon his knees, and throwing his trunk well across a chair, an assistant forced the nates well aside, so as to expose the tumor's base. With a long, large needle, made for the purpose, and loaded with a strong and rather large whip-cord, the two ends of which were kept even, one being colored with ink, the base was now transfixed perpendicularly, so as to carry the needle, and of course the two cords, through a ring, attached to a handle by a shaft, and carried up into the cavity of the tumor. The ring was now pulled out, bringing with it, of course, the white and black cord. These were now cut in two, giving four ends hanging from the interior, and an equal number from the exterior. In the same manner, a transfixion was now made, in a horizontal direction, doubling the number of ligatures hanging from the interior, and exterior, respectively. By a little reflection, it will be seen, that by tying two vicinal strings of the same color, which hang from the inside, then drawing on the extremities of the same which hang from the outside, the entire ring of protruded issue, constituting the base, may be ligated and strangulated in four parts, which will be equal, if the transfixions are accurate. Furthermore, it will be observed that the traction necessary to the induction of strangulation acts equally toward and from the center of the anus, and that accordingly it is not occluded by the operation. After its completion, the index finger could readily be passed within the ligatures.

Twenty-eight hours after the operation, the pulse had reached 128 per minute; at the end of forty-five hours it numbered 114, and vomiting, which had been a prominent and distressing symptom, had subsided.

At the end of four days the pulse was 96 per minute; patient was resting fairly; had but little pain, and was relishing very fair supplies of food. At this time the protruded mass was distinctly shaken, synchronously with the pulse. The skin about the anus, perineum and nates seemed perfectly healthy.

From this time to the end of the eighth day, there was no change worthy of note. Sphacelation of the summit, with separation of the slough, leaving about one half of the length of the tumor, had now occurred, leaving a surface which exhibited a degree of sensibility and vascularity, not admitting of the reasonable expectation of further sloughing from the first ligation. The ligatures were accordingly withdrawn. Ulceration had occurred about them to such an extent, that the orifices from which they were withdrawn would readily admit of the introduction of a finger. The intervening masses of tissue, embraced within the ligatures, were reduced to the size of a finger, and were very dense. A curved probe, armed with a ligature, was now passed readily around these masses, and they were subjected to a second ligation.

From the ninth to the eleventh day, inclusively, the patient was much more comfortable than at any previous time. Previous to this time, the catheter was in daily requisition, but urination was now readily effected. The pulse ranged at about 80; patient rested well, with almost perfect exemption from pain; on each of the two latter days there were fecal evacuations. Discharges of flatus were present from the first, and throughout the case.

On the thirteenth day, three of the ligatures last applied had separated. Daily fecal evacuations had occurred for several days; the remaining ligature, and the remnant of the protruding mass, were about ready to come away, and the general condition of the patient was, in every way, such as not to admit of a remaining doubt as to the success of the operation.—*Ohio Med. and Surg. Journal.*

On the Administration of Medicines to Children.

M. Wahu having much to do with the diseases of children, wishes to impress upon practitioners the importance in the case of important medicinal substances, having them administered, whenever practicable, in their own presence. He also states some of the means he adopts to enable certain medicines to be easily got down. Thus the subnitrate of bismuth, in large doses, which is of such value in diarrhea and the gastro-intestinal affection of children, often subsides to the bottom of the spoon when given in broth or milk; and it is much more readily taken also by children of about two years old, when given in chocolate prepared with water and thickened with tapioca or crumbs of bread. In this way, seventy grains and more may be given night and morning. In the same way, iron can be very readily given. Rhatany and catechu, two precious drugs, the action of which, when in small doses, is soon manifested in children, can also very readily be given in this chocolate panada. Chocolate made with either milk or water, and flavored with canella or vanilla, is usually very readily taken by children, and its dark color facilitates the mixing of numerous colored medicinal substances, which would be observed by the little patients were they given in milk, broth, or any infusion. Rhatany and catechu may also be well triturated and mixed with quince jelly, the flavor of which, while masking that of other substances, is very agreeable to children. Sulphate of soda and sulphate of magnesia are substances very difficult to get even adults to take. The sulphate of soda may often be administered to children by dissolving 10 parts in 150 in unsalted beef tea, and waiting until the child is sufficiently thirsty to swallow a cup of liquid almost without tasting it. For adults, the best means is to dissolve the sulphate of soda or magnesia in exactly the quantity of hot water necessary for its complete solution. This is allowed to get cold, and a glass of pretty strong lemonade is prepared. Holding a glass in each hand, that containing the salt is rapidly drank, and the lemonade is slowly drank — masking the detestable taste of the purgative, and supplying enough fluid to prevent its proving too irritating. Corsican moss is another substance which children take with difficulty; but if an infusion be made and strained, and then added to unsalted beef tea, it will be readily swallowed. Ipecac may be given either in the chocolate panada or in honey. When it is impossible to give any medicinal substance by the mouth, it may be administered by the rectum, taking care first to empty the gut by tepid water or an emollient decoction, and that the bulk of the medicated enema do not exceed from four to six ounces, so that it may be retained and absorbed. It should also be borne in mind, that as some substances, such as opium and other narcotics, are easily absorbed by the large intestine, doses less than would be given by the mouth must be employed. Quinine, on the contrary, requires to be doubled in quantity to be of any use. In forcing a child to swallow, the usual practice is to pinch the nose; but a part of the medicine will be rejected, if precaution be not taken to keep the nares completely closed *until deglutition is completed.* So, too, when medicines are thus forced down a child, it must be kept the whole time in a *sitting posture*, until deglutition has been completely accomplished. A suffocative cough may be induced if it be allowed to lie down again, still having some of the liquid in its mouth.—*Med. Times and Gaz.*

Physical Education.

[We clip from "The World" the following rules, which were adopted by the celebrated Dr. Winship in his physical training. He commenced his exercises when seventeen years of age. At that time he weighed only one hundred pounds; his health was not good, owing to dyspepsia. He now weighs one hundred and forty-eight pounds, can lift eleven hundred pounds, and is the best example of physical strength in the United States:—]

1. He has breathed an abundance of fresh air "almost constantly;" practicing, we suppose, inflation of the lungs.

2. He has drank no ardent spirits, and used no tobacco. The English "training" for the "ring," it is well known, prohibits these articles.

3. He has taken, nearly every day, about a *half hour's gymnastic exercise*, in the open air, and his is an example of the surprising moderation with which he has accomplish surprising results.

4. He has eaten heartily of such food, animal and vegetable, as agreed with his stomach, scouting the maxim that "you

should leave the table hungry." He began not to recover from his dyspepsia till he escaped this nonsense.

5. He has taken at least ten hours rest daily, including sleep, and appears to have devoted as much of it to sleep as nature would allow.

6. He has worn every article of his dress as loose and as easy as the freest action of his muscles and limbs would demand.

7. He has used the bath once a week in winter, and twice a week in summer. He denounces the daily use of cold baths.

He has pursued this course for nine years, and it has, during this long period, afforded him some important observations, if not discoveries. Here are a few of them:

1. That it is as easy to increase the strength of a human body as that of a magnetic.

2. That whatever increased his strength, increased his general health. He enjoys now the maximum of the latter as he probably does of the former—for his force is now equal to that of two ordinary men.

3. That by developing his body harmoniously, he could preclude the possibility of hernia, or any similar injury, that otherwise might result from an extremely violent exercise of his muscles.

4. That *lifting* is the safest and surest method of producing "harmonious" development, as also the most strengthening of all exercise—a fact not generally supposed.

5. That the performance of twenty different gymnastic feats once, is better than the performance of one feat twenty times.

6. That he gained more by forty minutes' exercise once in two days, than by twenty minutes once a day.

7. Twenty or fifteen minutes' gymnastics sufficed for each day.

8. That as strength increases, more intense but less protracted exercise should be the rule.

9. That increase of muscular power is attended with a proportionate increase of digestive power.

10. That great physical strength may be acquired independently of hereditary tendency to it—and, indeed, in spite of hereditary weakness of constitution.

11. That increased strength can not long continue on a purely vegetable diet.

12. That increasing the strength makes excretion takes place less by the skin, and more by the lungs and other emunctories.

13. That long before he could raise eleven hundred pounds with the hands, or shoulder a barrel of flour, he had put to flight the whole brood of ailments—sick headache, nervousness, indigestion, etc,, which are the familiar companions of American health, or rather ill health.

The Samsonian doctor proceeds to give some very judicious rules, deduced from his experience, for all aspirants to good health and manly vigor. He advises that:—

1. You should select for your sleeping room, an apartment on the "sunny side," and let the sun play into it, at least six hours a day, if the clouds will allow him to show his face.

2. Keep it ventilated all the time, and especially keep the windows partially open at night, but avoid drafts.

3. Practice general ablution once a week in cold weather, twice a week in warm. Too much bathing, he asserts, "defeats every intention for which water is externally applied."

4 Take not less than eight hours' rest per day.

5. Use no food which has been prepared in a copper, brass, or bell metal utensil. Use no water that has come in contact with lead.

6. Use such food as your appetite prefers, in spite of Liebig or any other authority.

7. Practice lifting as the best of gymnastics; but begin cautiously, and be careful of too much fatigue. Dumb bells he considers next desirable to lifting.

8. Never exceed half an hour in any gymnastic exercise.

9. Never rise early unless you retire early. Be sure to get sleep enough.

9. Gradually wear less and less clothing about the neck, till you can keep it entirely exposed without taking cold.

Such is an outline of Dr. Winship's system. It is singularly sensible; it is almost universally practicable, except, perhaps, the prescription about sleep. Could it be generally adopted in the United States, we doubt not that, in one generation, it would reduce the medical faculty fifty per cent., and the rates of life assurance correspondingly, and render us the most vigorous and most long-lived nation on the globe, as we now are decidedly the "smartest." *Vive la Yankee docteur!*

St. Ignatius Bean.—(Strychnos Ignatia—Ignatia Amara.

The highest order of scientific classification is that founded on a complete knowledge of the objects to be classified, taking into account properties and relations equally, at least, with the more evident circumstances of form and development. The object of classifying is to aid investigation and afford the best possible means for grasping the whole of a subject; in short, to construct a "royal road to learning." A complete classification of the vegetable kingdom would include, in addition to what it now does, an arrangement according to the medical properties of the individual plants, else we must conclude that their chemical construction is wholly independent of the agencies that are at work in their growth and development, as well as independent of the materials out of which they are composed, which is a statement of an impossible proposition, inasmuch as chemical analysis but separates the materials one from the other, while the therapeutic qualities of a plant are wholly due to the active properties of some one or more of these materials, free or in combination. This law of correct classification has been thus stated:—"Vegetables owe their medicinal qualities to the immediate materials which compose them. Vegetables of the same family contain, generally, the same materials or immediate principles. The characteristic medicinal property is mainly owing to one of the body. The intensity of this property is proportional to the quantity of the principle which determines it, and if this principle is wanting in a species, the characteristic medicinal property of the family fails with it."

Finely illustrative of this general principle is the genus strychnos. In four of the species—the tieute, nux vomica, ignatia and colubrina—there exists the same active principles which, as experiment has determined it, acts similarly on the vegetable and animal tissues. The tieute is the true upas tree of Java, and that with which the Indians poison their arrows. It contains the largest amount of the peculiar active principle of any in the genus. The nux vomica has been received largely into medical practice, and has been subjected to careful and extensive experiment and chemical analysis, while the ignatia and colubrina are as yet comparatively little known, save as powerful agents abounding in strychnia.

The ignatia, named by the Jesuits in honor of the founder of their order, is a native of Cochin China, the Philippine Islands, and other parts of Asia, and has been for a long time employed in these sections in numerous diseases. It is the opinion of Pareira that the nux vomica of Serapion was the St. Ignatius bean; however, the seeds came into the Dutch shops, according to Alston, about the latter end of the seventeenth century, and there is reason to suspect they were known long before this.

To MM. Pelletier and Caventou is due the first careful analysis of the ignatia, which is published, at considerable length, in the tenth volume of the *Annales de Chemie et Physique*. Say they—"We have obtained from the ignatia, strychnine under a crystalline form, perfectly white, and with all the characteristics of a pure substance, endowed with the distinctive and characteristic properties of salifiable bases—that is, with the faculty of uniting with acids, of saturating them, and of forming with them true neutral salts, soluble, transparent and crystallizable. Encouraged by this success, we undertook the analysis of the nux vomica, and immediately recognized in this material the precise alkaline principle of the St. Ignatius bean. In the nux vomica it constitutes, by its combination with an acid and mixture with a coloring matter, the yellow, bitter principle that has been described. The alkaline principle also exists in a wood known under the name of the *bois de couleuvre*, which naturalists call strychnos colubrina." According to this authority the analysis of the ignatia gives the following:—1st, the igasurate of strychnine; 2d, a little wax; 3d, a concrete oil; 4th, a yellow coloring matter; 5th, gum; 6th, starch; 7th, bassorin; 8th, vegetable fiber. The nux vomica, analyzed by the same process, furnished the same results, though in different proportions. It contains less of the salt of strychnine, but a greater quantity of concrete oil and coloring matter, while the colubrina is charged with fatty matter, contains less of salt of strychnine, a greater quantity of coloring matter, and the igneous fiber replaces entirely the bassorin and starch. Later analyses have not differed from this, except they incline toward denying the presence of any starch in the ignatia.

As has been said, the action that the nux vomica exercises on the animal economy has been studied with great care, and it has, by further experiment, been shown that the different substances given by the analysis of the various species of strychnos, after having been carried to the highest degree of purity, and been administered in various doses to many animals, afford the same general results as when obtained from the nux vomica. "The other principles contained in the same vegetables, when in a state of purity, have no action on the animal economy." The salts of strychnine have a more energetic action than the base itself, and this on account of their great solubility in a small quantity of acid.

Experiments upon the inferior animals were made with the ignatia by Pelletier and Caventou, in great numbers and under a variety of conditions, giving precisely similar symptoms, from the first stage till death ensued, as were shown under the influence of the other species of the strychnos, or of the active principle itself. Another extract from this paper will suffice on this head:—"No substance exists capable of forming with strychnine combinations not poisonous; and, consequently, the only means of remedying the effects of strychnine, and the substances which contain it, are those which, acting directly upon the animals, and independently of their chemical action on the poison, tend either to the expulsion as emetics or to weaken the spasmodic movements, the cause of the asphyxia to which the animals yield, or to prevent the asphyxia by surgical treatment and the mechanical means indicated by the physiologists that have been cited." The conclusion is, "that the strychnine, an alkaline and salifiable base, is the active and poisonous principle of strychnos, particularly of the ignatia and nux vomica; that in all its combinations it maintains its properties on the animal economy; that we can not, perhaps, by therapeutic means, remedy the ravages it makes—and it will be vain to seek for a substance which, as an antidote, will be capable of preventing its effects by neutralizing it."

We shall next inquire, what are the effects of strychnia and its combinations upon the nerves?

The degree of effect varies with the quantity employed, but it appears to be the same in kind, being confined to the ganglionic system of nerves and the spinal cord, extending as high up as the medulla oblongata, and, according to Flourens, influencing the cerebellum, but not directly affecting the cerebrum. Hence in fatal cases the intellect is not disturbed till the extinction of life. The decapitation of animals does not hinder the characteristic effects of this agent, while, on the other hand, the removal of the spinal marrow completely prevents its peculiar agency, even though artificial respiration be maintained. "From some experiments of Segalas, it appears also to exhaust the irritability of the heart; for in animals he found that organ could not be stimulated to contract after death, and life could not be prolonged by artificial breathing. These differ from all narcotic poisons by not destroying the sensibility. During the intervals of the fits the sensibility is, on the contrary, hightened and the faculties acute. (Christian.) M. Magendie having, by a series of experiments, ascertained that the whole family of plants of the strychni amari had the singular property of acting immediately on the spinal marrow without affecting, except indirectly, the functions of the brain, thought they might be advantageously applied to the treatment of disease. He soon put his newly-discovered remedies to the test, and his conjecture, he says, "was verified by numerous experiments made at the bed side." In his "numerous experiments" he discovered some remarkable physiological facts. His attention, in the use of this agent, was mainly directed to paralytic subjects, and he found that it excited convulsions in the paralyzed part before any action was discoverable in the sound parts. In hemiphlegia, the sound side would be perfectly quiet, while the paralytic parts would be affected with tetanic shocks and profuse perspiration; while any contact of an external body with a part under the influence of strychnia, which is supplied with nerves originating from the spinal cord, immediately excited convulsive action. Of these two phenomena, Dr. Granger gives an explanation as follows:

"Strychnia acts by preference on the paralytic limb or limbs, because the cerebral control is removed from the paralyzed limb. If the cord be divided, the pure spinal power remaining, when the skin is touched the limb is retracted, and must be retracted, because the cerebral control is wanting. So when the spinal cord is stimulated by strychnia, it must act on the limb or limbs from which the cerebral power is withdrawn."

These appear to be the results of the investigation on the constitutional effects of the strychnine combinations. We now inquire what classes of diseases come into the range of these agents?

The omni therapeutic properties attributed to the ignatia, in a pamphlet from the pen of a once afflicted but now restored clergyman, gave, very naturally, the impression of a quack advertisement, though the paper called the attention of scientific practitioners, somewhat extensively, to the real virtues of the ignatia. This reverend gentleman presented a most formidable array of diseases which his pills had cured, embracing well nigh the whole nosology of modern times, but the farrago was pardonable from the extremely modest and non-committal form in which it was offered, and as being not the results of his own personal experience, but given on the strength of communications from those "in every class of society" who professed to have been cured by the use of his preparations. While it is unreasonable, with any knowledge of the scope and mode of action of the ignatia, to accept a vast deal of what he gives, as capable of being reduced by this agent, yet we can readily see why it is applicable to a wide range of the symptoms enumerated.

That condition of the body indicated by a great number and variety of symptoms called dyspeptic, is clearly dependent upon weakened and imperfect action in the digestive organs. The organ of the digestive apparatus, in consequence of its direct exposure to so many irritating substances, and its intimate sympathetic communications, is affected with many forms of sub-acute and chronic gastric irritation and inflammation, giving rise to general weakness, uneasiness of body, and a host of distressing sensations, while, at the same time, the moral and intellectual faculties are, in their turn, liable to be affected by these disordered functions. The stomach and duodenum are the most eminent of the digestive organs, and these are connected together, as well as combined with all their congeries appropriated to the perfect elaboration of the nutritive and sustaining principles of the economy, by the ganglionary system of nerves. The stomach is the center of the digestive apparatus, and owes this character to its intimate union with the great solar plexus—the center or brain, if it may be so termed, of the ganglionary system, regulating the nutritive functions. It is very clear, therefore, that excesses of any kind, or modes of life, that do not give these organs their appropriate play, or weaken it by over action, and so, in either case, destroying the equilibrium of the regular functions, must tend, to a greater or less degree, to deaden the action of this entire system of nerves, and the philosophic adaptation of the remedy to the disease is evident in the numerous symptoms, evincing a derangement of the digestive apparatus in the case of persons in the pamphlet referred to, as having been overcome, and the system restored to a healthy tone by the use of the ignatia. It is with some satisfaction that we refer to this catalogue of maladies, in that it is made up of the results of individual experience; and making all allowance for the probable deception in attributing more effects to the cause than it can conveniently produce, we can, after all, trace a true connection between the properties of the ignatia and the status of the constitution it rearranges.

The specific use of the ignatia may be stated thus:—It has a tonic, stimulating effect on all the organs under the influence of the ganglionic system of nerves, by its acting directly upon them, exciting and equalizing their weakened and disturbed action, and consequently restoring to their equilibrium the digestive functions.

The ignatia appears to be used quite indiscriminately in the countries where it is native, though how far, beyond what has been stated, it is useful as a remedial agent, remains to be shown from the experiments of our hospital and other practitioners. The large amount of strychnia in the ignatia calls for great care in administering it, and also for especial attention on the part of the profession toward discovering some available antidote for the poison when taken in the pure alkali or in its combinations. Though among the most painful in its operations of all the poisons, it is swallowed as a luxury by those who are determined to die before their time; and when taken in any considerable dose, it is about impossible to hope for relief to the sufferer from any agent used as counteracting. Olive oil, lard and morphine have been used, as also chlorine, bromine and iodine, in the endeavor to form an insoluble salt with the strychnia; but the absolute necessity of immediate action has given these antidotes only indifferent success. The large and constantly increasing demands for the ignatia, and its consequent use, will undoubtedly soon develop its important properties, and give it a prominent place in our materia medica. So far as it appears, this is a specific agent; and every discovery of such agents, with their applications and limitations, and bringing them universally into practice, is, to that extent, perfecting the science of medicine.

Swill-Milk.

Humanity here interposes and calls for the immediate and unconditional abolition from New York island of every swill-milk establishment. The total number of deaths in this city, as already stated, amounted during last year to 21,645, of which number 12,943 were children. A large majority of these deaths are traceable, directly or indirectly, to the use of swill-milk. Can stronger arguments than these records present, be necessary to influence prompt action on the part of the Common Council for the immediate destruction of these human slaughter-house establishments? Last year the Mayor of this city addressed a communication upon the subject to the Academy of Medicine, asking investigation. The following are the results arrived at:—

1st. The housing of milch cows in great numbers within the narrow space allotted to them in the distillery stables of this city, of Brooklyn and Williamsburgh, is of itself sufficient to vitiate their health and render their milk unwholesome. But in the actual condition of the stables, these deleterious effects are materially augmented by want of cleanliness, insufficient light, and a vitiated atmosphere, not to speak of the restraint and want of exercise to which the cows are subjected, nor the unwholesome food supplied to them.

2d. The number of cows kept at the few distillery stables, which still exist in this city, is of no great account, as in all they probably do not exceed six hundred. The business of supplying milk for this city from swill-fed cows, is now mostly conducted at Williamsburgh or East Brooklyn, where the distillery stables are numerous, extensive, crowded, wretchedly conducted, and filthy to the last degree. Many of the animals confined in these stables were found in a sickly condition, and on careful inquiry at one of the largest of these stables, we ascertained that the annual mortality among the cows confined there was not less than ten per cent.

3d. Such of the cows at these establishments as remain comparatively healthy, are retained, without once leaving the stable, as long as they continue to yield a sufficiency of milk, usually for about a year, after which they are fattened for the market, slaughtered, and sold as beef. The beef produced from these animals is unsavory and easily recognized from its offensive odor; and this odor is not dissipated even by the process of cooking.

4th. The swill which constitutes the principal food of the cows at these stables, and which is but the refuse material left after the process of distillation, is, even at the period of withdrawal from the alembic, and long before it is distributed to the feeding-troughs, found to be highly charged with acetic acid. Its acidulous quality, intermixed with a sort of saccharine and farinaceous flavor, is not very disagreeable to the taste, but taken into the stomach, the swill operates briskly as a purgative, disturbing the bowels and augmenting the urinary secretions. These effects were sensibly experienced from the use of it by two of the members of the committee; and from the continual purging of the cattle, and the excessive amount of urinary secretions, we are led to the belief that its effect upon the cows is not materially different from its effect upon the human system.

5. The milk of these cows does not exhibit the characteristics of wholesome milk. It presents almost invariably an acid reaction, whilst the milk from healthy, grass-fed cows is, when first drawn, always alkaline. The acid quality of the distille-

ry milk is, it is true, not perceptible to the taste while the milk fresh, but it is always recognizable by chemical tests. And this feature is, of itself, sufficient to condemn the milk in question as an article of food, especially for young children. This remark applies to the milk of such of the cows in those stables as appear to be in good health. It must apply with still greater force against the milk procured from such of them as are actually diseased. And it is ascertained that the milk from the diseased cows is mixed with that from the others, and distributed to the customers.

6. The cases collected under the direction of the Committee, by Dr. Percy, demonstrated the fact independent of any chemical examination or any *a priori* reasoning, that the milk procured from those swill-fed animals, is injurious to those who use it.

Dr. Reese, in an elaborate report upon infant mortality, remarks:—"All the artificial adulterations of milk, as by water or chalk, are harmless, nay, laudable, compared with the poisonous supply obtained from cows fed on distillery slops, for to this poison chemistry itself affords no antidote, since it defies all analysis or synthesis, a poison, *sui generis*, utterly destructive of health and life."

Further remarks upon this subject are purposely avoided. If the testimony above given, and the voluminous official evidence already in possession of the city, showing the evil effects from swill-milk upon the general health, are insufficient to effect a change, then the work of slaughter must be proceeded with, and increased numbers of deaths be yearly added to our city bills of mortality.

The introduction of swill-milk into this city from adjoining cities, towns or villages, should be prohibited by ordinance under severe penalties; otherwise the evil complained of would be but partially removed by the suppression of swill-milk establishments on this island. The attention of the Common Council is earnestly directed to the subject as one calling for immediate action.

CONCLUSION.

The undersigned has thus submitted to the Common Council his views upon those subjects, which, in his judgment, are of importance to the public health. In their examination, one fact at least will attract attention, namely,—the very limited power possessed by the City Inspector to meet the sanitary requirements of the city. In nearly every case to which he has called attention, he is without power to act, or where possessed, it is so circumscribed and limited that it amounts to nothing. While each of the other departments of the city have their wants liberally attended to by the Common Council, this department, the first, and by far the most useful and necessary to the public health, has received but little attention. Its past inefficiency is justly chargeable to this neglect, and not to those entrusted with its affairs. During the short time that the undersigned has officiated as head of this department, in all instances where he has received support from the Common Council, the results have proved satisfactory to the city and beneficial to the public health. Further success will depend mainly upon the sympathy and support extended to him by your honorable body. The health of the city is of the first and highest importance. To ensure it, the people are prepared to make any necessary sacrifice, provided they can receive in exchange just administration. But with, as at present, limited power to act where the health of the city is at stake, or with no power at all, the efficiency of the department can not be guranteed.

With these remarks, the undersigned submits the whole question to the honorable, the Common Council, for such action thereon as, in its wisdom, it may deem proper to take.

Respectfully submitted.

DANIEL E. DELAVAN,
City Inspector.

The Ovary.

1. Should the views supported by Professor Willigk be confirmed, the opinions current concerning ovarian gestation must undergo considerable modification. In any case they are valuable as suggesting the necessity for more minute investigation and description of cases. He adopts the views enunciated by M. Mayer in 1845, who called in question the existence of ovarian gestation. Professor Willigk criticises a recent alleg-

ed case of ovarian gestation, published by M. Alquie, who describes an instance in which "ten embryo-sacs, with fat, skin, hairs, cartilages, and bones, were found," and concludes that there was here a tenfold impregnation of the ovary and intra-ovarian gestation. The improbability of the impregnation of ten ova at once is urged against the admission of this case. In many others he urges that the microscope determination of the parts has been neglected, leaving it a matter of doubt whether what was described as chorion or fœtus was done so correctly. Thus, he examined a preparation, labeled ovarian gestation, in the Olmutz museum. He found in the right ovary a cavity the size of a hen's egg, to the flocculent lining of which a short, thin stalk was attached, holding a body that had been taken for a fœtus of seven weeks. Microscopic examination showed that what had been taken for chorion-villi was nothing but a delicate growth of the connective tissue of the cyst-wall, and the seeming fœtus was a solid mass of connective tissue. So, in another preparation in the same museum, it was found that during the autopsy a separation had been made of adhesions binding the left Fallopian tube with the ovary; a cavity was revealed the size of a walnut; since the inner surface of the cyst was covered with villous excrescences and clots, it was concluded to be the embryo-sac of a fœtus formed in the abdomen. Microscopic examination proved that the villi consisted of the ordinary connective tissue; and on the other hand, true chorion-villi were discovered in the cavity of the Fallopian tube near its fimbriated extremity, which, with other appearances, fixed this as a case of Fallopian-gestation.

The professor demands, as a condition for admitting a case as one of ovarian-gestation, that the fœtus itself, or undoubted remains of it, the membranes, or the placenta, shall be found within the fibrous capsule of the ovary; and says that, tried in this manner, there is no case that seems as yet to guarantee the existence of this form of extra-uterine gestation. He then analyses several cases of alleged ovarian gestation vouched by various authors, and disposes of one related by Kiwisch by comparing it to the following case examined and figured by himself. It is a preparation in the Olmutz museum. The right Fallopian tube is closed at its free end, and bears traces of adhesions; the right ovary has a scarred surface, and contains several Graafian follicles and corpora lutea; the two leaves of the broad ligament of the left side inclose a round sac, the anterior wall of which shows a wide irregular rent. This sac contains, besides clots, an embryo partly surrounded by the amnion; the inner surface is nearly covered with fine chorion-villi, which at one spot are developed into a placenta. When the posterior fold of the broad ligament is traced backward, its direct course over the left ovary is seen. This ovary is inseparably united with the abnormal embryo-sac, its surface being marked here and there with threads of connective tissue. This case is one of gestation between the folds of the broad ligament, and he suggests that Kiwisch's is of the same kind.

2. Rokitansy refers to the two species of corpus luteum, the one occurring in menstruation without conception, the other with conception and pregnancy. The proper characters of the latter consist in long persistence, extending over the period of gestation, in the great extent of the yellow stratum—that is, in its thickness and the depth of its convolutions, in the lesser saturation of the coloring matter, and in the speedy retrogression of the yellow color of this stratum, whilst it takes on a yellowish-red or reddish color; in the speedy discoloration of the nuclear mass formed of extravasation, and in the transformation of this into cellular tissue. The outer layer is an outgrowth of the inner vascular layer of the fibrous coat of the tunica propria of the Graafian follicle. It consists in cells of cellular tissue, in which a certain portion inclose fat granules, and even pass into fatty metamorphosis. In the menstrual corpus luteum this outgrowth is much smaller. The tunica propria growing to the yellow stratum is in the true corpus luteum very highly vascularized during its development and growth; considerable vessels run from it into the sinuses of the yellow stratum. The cause of the folding of the yellow stratum lies most probably in the original unequal outgrowth of the follicle in the form of a papillary and ridge-shaped swelling, upon which the yellow stratum appears to be drawn in elevations and depressions. The extravasation which forms the nucleus of the corpus luteum, by the above-mentioned speedy absorption of the coloring matter of the blood, grows

to be soft, gelatinous, or to a fibrous cellular mass. In the menstrual corpus luteum there commonly remains an indented pigment-mass adhering to a gelatinous substance. Of the true corpus luteum there finally remains a crumpled, white, callous body, filling the retracted follicle, which, when it possesses a cavity, contains in it a gelatinous mass; these are the so-called corpora albida. The menstrual corpus luteum degenerates into a thin-walled capsule, which incloses an orange-yellow, nut-brown, black nucleus, and is soon confounded with the ovarian stroma.—*Brit. & Foreign Review, April*, 1860.

On the Assumed Presence of Iodine in the Atmosphere, and in various Animal Substances, etc.—BY DR. LOHMEYER.

Some years since, Chatin instituted a number of experiments as to the distribution of iodine; he not only found this element in all spring water, fresh water, and land plants, in most diverse kinds of food, artificial beverages, wine, beer, etc., but is likewise of opinion that it is always present in the organisms both of fluviatile and terrestrial animals.

At about the same time, Meyrac, Marchand, and others, proved that the distribution of iodine was much more general than had hitherto been supposed: so that its detection in the animal organism appeared less remarkable; in fact, it may be regarded here, as everywhere else in nature, a constant associate of chlorine.

But Chatin regards iodine not as an accidental but an essential constituent of the organism, and, according to his statements of the quantity present in eggs, milk, etc., he appeared to be perfectly justified in doing so. Thus, according to him, a hen's egg contains more than a litre of milk, and this again more than our ordinary food and drink. He also considered iodine of importance in the process of respiration. He states, that the normal quantity in the air is 1.5 milligrm. in 4000 litres, and that a portion of this disappears during respiration.

Fourcault, while occupying himself in the study of goitre and cretinism, examined the air in the districts where these diseases prevailed; he found that the atmosphere of those places was free from iodine, and thence inferred that the absence of iodine was the principal cause of these diseases. Chatin likewise asserted that the air of the Alps is much poorer in iodine than that of Paris; he found less iodine in the valley of the Rhone than in the valley of the Seine, still less in the valley of the Isere, and a constantly diminishing quantity as he approached the Alps. After losing sight of it in his investigations on the French side of the Alps, he did not meet with it again until he reached the plains of Piedmont.

Since, according to these statements, the influence of iodine upon the development and normal action of the animal organism would appear to be of very great importance, Dr. Lohmeyer has been induced to repeat the experiments of Chatin, and to submit his statements to a very careful re-examination.

Goitre does not occur in Gottingen, while in some neighboring villages—for instance, Lengden—it is very frequent. If it were the absence of iodine in the atmosphere to which the evil is attributable, it might be expected that a sensible difference in this respect would be recognizable in the air of the two localities. Consequently, Dr. Lohmeyer examined, in the first place, the air of Gottingen. He allowed more than 4000 litres to pass in small bubbles through a solution of caustic soda, adding from time to time caustic lime to take up the absorbed carbonic acid. The apparatus was so arranged that the passage of 4000 litres of air occupied nearly a week; it might, therefore, be safely assumed that no iodine could escape absorption. Nevertheless, on testing the liquid for this element, only a negative result was obtained; consequently, the examination of the air at Lengden was perfectly useless.

Dr. Lohmeyer has sought for iodine in cow's milk and hen's eggs, with equal negative results. In twelve eggs, previously separated from the shells, and in 600 grms. and 6700 grms. of milk, no trace of iodine could be recognized. The liquids in which the iodine was to be determined amounted in all cases to only a few cubic centimetres; it was tested for by means of cold starch-paste, and pure nitric acids, into which nitrous acid had been previously passed.

Dr. Lohmeyer does not question the probability that iodine might be detected when much larger quantities of milk or eggs are employed, or that under certain circumstances it is present in the air, especially near factories and chemical labratories; but he considers himself justified in concluding, from his examination of the subject, that the statements of Chatin are altogether erroneous, and that the absence of iodine in the atmosphere is in no way the cause of goitre and cretinism.—*Nachrichten v. d. Gesellsch d. Wissensch. zu Gottingen*, *Druggist*.

M'Dougall's Disinfectant.

Alexander M'Dougall, of Manchester, England, has discovered, within the last three years, a new Disinfecting Power, of which Baron Von Liebig, in a letter to Lord Denman, of date Dec. 20, 1857, says, that "it rests on sound scientific principles," and that "he can not doubt the good working of the same." Its general use in Great Britain has more than confirmed the baron's opinion.

As a deodorizer or purifier of the atmosphere, it is unequaled. We have used it for the last three months in our household, and can bear testimony to its excellence. Some friends to whom we gave a few papers, inform us that it is invaluable.

In his lecture in 1856, before the Bakewell Farmers' Club, at Perth, Mr. M'Dougall claims for his disinfectant, that it is the best "condenser of the fertilizing properties in natural manures" which has yet been discovered. The excreta of healthy animals are never putrescent when first voided, but they speedily become so by exposure to the air. It is this decomposition in and around stables, cow-houses, piggeries, or wherever animals are kept, that throws off the gases that are so offensive and so detrimental not only to their health, but to the health of those who attend upon them. The great loss of cattle from disease is owing to this cause, and to this evil must be added another one almost as serious, the ruin of their manure for the want of means to stop its decomposition.

Many farmers have a prejudice in favor of putrescent manure, simply because they know no better; but it is destructive of their best interests. The emanations therefrom consist of sulphureted and phosphoreted hydrogen (two poisonous gases) in combination with ammonia. They bring sickness, and often death, to the inmates of the homestead, and to the stock upon the farm.

Sprengel proved that a stall-fed cow will throw off 15,000 lbs. of urine in a year, which will produce 240 lbs. of ammonia, and of this, 162 lbs. are lost by the ordinary mode of treating it. This loss, at the market-price of the article, is equivalent to the sum of $21. It has been reserved for Mr. M'Dougall to discover the secret of fixing this ammonia. He rejected chloride of zinc and nitrate of lead, because of their acid, corrosive and poisonous character, rendering manure unsuitable as food for plants. Chloride of lime he found too expensive and unpleasant for use, as it gives off free chlorine, which is irritating in its action upon the lungs; but the fatal objection to its adoption is, that it decomposes the ammonia which manures contain. Gypsum is too liable to decomposition itself to be used as a disinfectant, and is not an absorber of ammonia. Copperas or sulphate of iron he found to be useless, because it forms a sulphate with the ammonia of fecal matter, and gives off sulphureted hydrogen. Charcoal is not adapted to the preservation of manures, because it actually sets up a process of slow combustion, by causing the gases of excreta to combine with the oxygen of the air, and thus to burn out their organic portions.

In order to arrive at a correct understanding of the subject, Mr. McDougall reminds the reader, that the gaseous emanations from fecal, and other organic matters used as manures, are sulphureted and phosphoreted hydrogen, either free or in combination with ammonia, and that the fertilizing elements to be fixed are phosphoric acid and ammonia. The agent by which he proposes to remove the noxious bodies and preserve the valuable ones, is a compound of two acids and two bases. The former are sulphurous and carbolic acids, and the latter magnesia and lime. These four exist in the agent as two salts, to-wit: sulphite of magnesia and lime, and carbolate of lime. Sulphurous acid is the only agent which will decompose the noxious emanations of putrescent excreta or any other animal offal, without injury to the elements to be preserved. It is also highly anti-putrescent, because of its strong affinity for oxygen. Carbolic acid is also anti-putrescent by its property of coagulating albuminous substances. It is a liquid, oily compound, which, being combined with lime, is easily reduced to the form of powder. Magnesia is the only available element which will combine readily with the ammonia and phosphoric acid to be preserved, and thus is formed the triple phosphate of magnesia and ammonia, the best possible of all combinations for agricultural purposes.

The theory, then, of M'Dougall's Disinfecting Powder is the use of sulphurous acid to remove the offensive smell, carbolic acid to prevent putrefactive fermentation, lime to neutralize and dry this latter acid, magnesia to combine with and preserve the phosphoric acid and ammonia, and, in special cases, a soluble phosphate to prevent the loss of any of the ammonia. In actual use it has done all that was expected of it. It has made dwelling-houses, previously fetid and unsanitary, pleasant and healthful; it has purified the air of the stable, the cow-house, the kennel, the piggery; it has proved a blessing in the hospital, the infirmary, the camp, and the barrack; it is in regular use in British transport ships and ships-of-war and their commercial marine; and its use in vaults, grave-yards, and coffins, has been perfectly satisfactory.

A case is given by M'Dougall of its eminent success in the stable. Murray's Horse Bazaar, near Manchester, in England, keeps some sixty of the finest horses in the country. He uses the disinfectant freely. Every morning the straw bedding is turned back, the stall swept, and the powder sprinkled over the floor, and the bedding laid down again. The urine tank and the dung-heap are rendered scentless by the free use of the powder, and the result is, the stables are sweet and wholesome, and the horses for three years have escaped all disease, swelling of feet, and other afflictions incident to stabling. Mr. Murray has been able to realize treble his outlay for the powder, in the sale of the manure from his stables, besides effecting a decided saving in the quantity of straw used for bedding.

Dr. Muspratt, the celebrated English chemist, ranks this disinfectant among the most important discoveries of the age. He regards it as meeting all the desiderata of a disinfectant, without any drawback. It has been used very successfully in English fields, as a destroyer of the turnip-fly, both by mixing it with the seed before sowing, and afterward by sprinkling it over the young plants. The inference is, that if sprinkled over wheat-fields, it will destroy the Hessian fly, the wheat midge, the joint-worm of Virginia, and the chinch-bug of Illinois. But this remains to be tested, and a fine opportunity is afforded to our farmers of doing so next month, if they are public-spirited enough to make the experiment on a reasonable scale.

But city life affords the largest sphere for the use of a disinfecting agent, at all times and under all circumstances, and from our own experience in the use of M'Dougall's Powder, we are persuaded that it will be found to meet the most sanguine expectations. We are informed that the hotels and hospitals in New Orleans, Boston and New York, are using it with the most satisfactory results.

In thus stepping aside from the frettings of politics to notice what we have found by absolute experiment to be a most desirable adjuvant of health and comfort in the ordinary walks of life, we are sure we shall not meet with the disapprobation of our readers. They will find, by reference to our advertising columns, where they can procure this valuable disinfectant.—*Baltimore Patriot.*

PART THIRD.

CLINICAL REPORTS.

Newton's Clinical Institute.—*Spring Session of* 1860.—Services of Prof. R. S. NEWTON.

REPORTED BY JAS. A. HENSHALL, M. D.

CASE 636.—March 3. AGNES BONNER, aged 32. *Chronic Hepatitis.* This patient has been affected about three months with chronic inflammation of the liver; both lungs are also materially affected; she has a severe cough, attended with profuse expectoration; she is much troubled with night sweats, chills, etc.; tongue coated white; pulse 120, and weak.

"Which side do you lie on at night, Mrs. Bonner?"

"I can not lie upon my left side at all, sir; and when I lie on my right, it causes me to cough, and produces shortness of breath."

"Where do you feel the most pain?"

"In my right side, sir, just under the last rib; it also feels sore, as if it was bruised; and sometimes I have a stitch in my side."

"Have you taken much medicine?"

"Yes, sir, a great deal; and I was blistered all over my right side."

"Did it seem to do you any good?"

"No, sir; I am getting worse all the time."

"How are your bowels and your appetite?"

"My bowels are not regular, and my appetite very poor. I scarcely eat anything at all."

This case, gentlemen, you will perceive, is a very bad one, and one that requires considerable time and close attention to guarantee a cure; and this poor woman is not in circumstances to secure the attention and care which she requires. I will, however, prescribe as follows:—

℞.—Aquæ Regiæ, ʒ j.

Of this take two teaspoonsful, and add to a quart of water, and apply with friction over the region of the liver, night and morning.

℞.—Quiniæ Sulph. ℈ j.
Hydrastin.
Prunin, *aa* grs. x.
Syr. Zingiberis, ʒ ij. M.

Take a teaspoonful, three times a day.

℞.—Podophyllin, grs. ij.
Leptandrin, " vj.
Morph. Sulph. " ss.
M. Ft. Pil. No. vj.

Take one pill, night and morning.

March 16.—Cough much better; has had no return of the night sweats or chills; otherwise about the same. Continue treatment, and take also,

℞.—Pulv. Ipecac. et Opii Comp. ℨ ss.
Ft. pulv. No. x.

One every three hours.

April 3.—Cough still improving, and pain in side not so severe; rests better at night; bowels regular, and appetite improving.

Continue treatment. Last appearance.

CASE 637.—March 9. JNO. DUNNIGAN, aged 48. *Paralysis of Rectum and Bladder.* This patient attributes his present condition to an injury which he received by falling from a wagon about three years ago, but he felt no serious effects arising from the fall until three months afterward.

"What were the first symptoms which gave you uneasiness, Mr. Dunnigan?"

"I first felt a numbness in my legs; they felt very cold, as if they were turned into ice, and soon after this I found that I was unable to control the evacuations from my bowels and bladder."

"What is your condition at present in regard to these evacuations?"

"For the last year my bowels have been costive; sometimes I will have no passage for a week, and I will then take some pills, which cause a free evacuation, but I have no control over it."

"How is it at present in regard to your bladder?"

"The urine, sir, dribbles from me constantly, and it takes a great effort to discharge it in any quantity, and then it is accompanied by a chill."

"Do you at any time feel a desire to go to stool?"

"Yes, sir, I have that feeling nearly all the time, but, as I said before, it is sometimes a week before I have an evacuation."

"Do you ever experience any pain in your back?"

"Sometimes I feel a pain over my kidneys, and at such times my urine will be high colored."

"Have you received much medical treatment?"

"I have been in several hospitals, but they did not benefit me, and said that I could not be cured."

This case, gentlemen, is a singular one, and one which you may never see again. I am inclined to think that at the time he fell, he received a concussion of the spinal cord, inducing a deposition of blood in the spinal canal, and producing compression of the cord about the last lumbar vertebra. As the secretion of urine is not affected, I think the compression must have occurred at this point.

I can promise nothing at all in this case, but can recommend the following treatment as being very beneficial in a case somewhat similar:—

℞.—Restorative Wine Bitters.
Syr. Helianthus, *aa* O ss.
Ferri Phos., ʒ ss. M.

Take a tablespoonful, three times a day, and apply the Irritating Plaster over the sacrum.

March 13.—Has had two operations from the bowels every day since he was here, and is sensible of their approach, but can not control them. Urine passes freely, and the numbness of the legs has disappeared.

Continue treatment.

March 16.—Has had no operation from the bowels for four days; feels about the same as last time he was here.

Continue former treatment, and add—

℞.—Podophyllin, grs. iij.
Jalapin, " v.
Leptandrin, " x,
Capsici, " ij.
M. Ft. Pil. No. vj.

Take one pill, night and morning, and if there is a tendency to tenesmus, inject a tablespoonful of molasses to a quart of water, per rectum.

Last appearance.

CASE 638.—March 20. HENRY CAMERON, aged 17. *Lacerated Wound.*—About a week ago his shirt sleeve caught in the band of a shaft and drew his arm after it, lacerating the inner side of the arm, just above the elbow, quite extensively, and exposing the muscles and adjacent blood-vessels. The physician who dressed the wound at the time, neglected to unite it by sutures, which should have been done. The wound will now have to heal by granulation.

Apply mild Zinc Oint., three times a day.

April 3.—Discharged, cured.

[Quite a number of other cases were before the class, but as the session was so near out, they had no opportunity of appearing more than once, and a report of such cases would be uninteresting.—REPORTER.]

PART FOURTH.

EDITORIAL.

ECLECTICISM—ITS PROGRESS.

(Continued from page 501.)

In our last number we briefly set forth the causes which led to the origination of Eclecticism—what it claims to do—and why it should hold the first place among the various medical systems. In this, we shall endeavor to state concisely the great leading principles which distinguish Eclecticism from Allopathy. These are few, but are cardinal principles; they admit of a wide range of application, and their observance constitutes the great superiority of Eclectic over every other system of practice.

1. Eclectics *aid nature* to cure disease.

In the human, as with other organized beings, two actions are going on—processes of nutrition and processes of waste. Their equilibrium is health; a disturbance of the proper balance constitutes disease. When disease is established, nature rallies her resources to throw it off; and in a majority of cases, if there is no interference, she triumphs, and health is reinstated. Medical aid, however, is almost universally resorted to, before nature has time to effect her work, in simple as well as graver maladies. In these cases, what does unmodified Allopathy teach? It directs its disciples to strike directly *at* the disease, unmindful of the efforts of nature, or condition of the system. On the contrary, the Eclectic is instructed to assist the natural powers, to become an ally to *vis medicatrix naturæ*, and enable it to perform the cure. In inflammation, for example, the old-school-man, believing that it consists in too rapid oxidation or burning of the constituents of the blood or tissues themselves, employs his lancet, calomel and antimony, which remove or disintegrate the red corpuscles—by which oxygen is conveyed into the system—and thus labors to stop inflammation by cutting off the oxidizing agent, upon the same principle that the flame of a lamp is extinguished, when deprived of a supply of air. What is the consequence of such treatment? Very often, *death*. We are sorry to record that many a valuable life has been sacrificed to such medical interference; and when the patient does recover, he is indebted to the lightness of his attack or strength of his vital powers, which were able to overcome both his disease and medication. In proof of this assertion, we have only to refer to the well known experiments of Dr. Dietl, the learned German, who treated a large number of cases of pneumonia with and without medicine. The per centage of mortality among those treated by bleeding and antimony, was 20.7; while among those for whom diet and rest alone were prescribed, it was 7.4 only.

The Eclectic, on the other hand, pursues an opposite course. He is taught that inflammation is incompatible with a healthy functional and structural condition of all the organs; that when one is diseased, another performs a vicarious action, and that nature thus labors to eliminate effete materials from the blood, thereby permitting oxidation to go on properly. Hence he stimulates the organs of secretion—the bowels and liver with vegetable chologogues, the kidneys with diuretics, and skin with diaphoretics. He subdues excessive heat by frequently sponging the surface with cold water, and controls the circulation with arterial sedatives, while the vital powers are sustained by febrifuge tonics, as quinine and iron, which aid in building up the corpuscles, and thus promoting the process of oxidation. Under this mode of treatment, ample experience has demonstrated that disease yields much more rapidly than under any other, and when disease is once subdued the patient is not left feeble and anemic, and is not compelled to go through a long period of convalescence. The same principle may be applied to the treatment of all diseases. Indeed, the great secret of cure consists in keeping the depurating organs active, and stimulating the process of oxidation.

2. Eclectics, in selecting their remedies, look to their constitutional effect.

There are many medicines which, if continued for a long time, will eventually produce serious mischief, and become themselves the cause of disease. Preparations of mercury, for example, according to the best authorities, will establish mercurial rheumatism, caries of the bones, periostitis, etc., etc. The same is true, but to a less extent, of antimony, arsenic and lead; and yet what do old-school-men prefer, as an alterative, to calomel? What remedies hold a more prominent place, in their materia medica, than the others specified? Eclectics claim, and prove by every day's success, that all indications can be more speedily fulfilled, by safe vegetable agents, or such minerals as leave no deleterious effects; and hence they entirely discard mercury, antimony, lead and arsenic. Nothing is given which experience proves is as serious in result, if not worse, than the original disorder. Upon these two great principles, the system of Eclectic practice is based. Every reasonable mind will see at a glance how rational and safe such a practice must necessarily be.

Progress of Eclecticism.—The birth of Eclecticism created a terrible commotion among medical men. Old fogies saw in it the germ of a mighty revolution, which was to uproot the foundation of their fossilized notions, and dethrone that mighty potentate—calomel. They endeavored to crush the new system in its infancy, to brand it with that infamous epithet, *quackery*, and make the name an odious sound to the people. But they have signally failed. The doctrine which was denounced, and at which the finger of scorn was pointed, despite all denunciation and abuse, gradually grew in strength and favor with the public, is daily gaining proselytes, and is working mighty revolutions in the practice of physic. The people are emphatically becoming Eclectic. They are tired of the lancet and salivation, and the cry is constantly heard at the bedside of the sick, "doctor, don't give me calomel!" A few years ago, practitioners were deeply rooted in the opinion that the lancet and mercury were the only successful weapons with which disease could be combatted. A man who had the temerity to treat a case without them, was denounced as an illiterate man-slayer. The old-school-men were so taught, and so believed, and were to be more pitied than blamed. But now, as Eclectics have demonstrated that they were frightened at a bug-bear; that such means, instead of being remedial, are, in most cases, positively injurious, the man who blindly adheres, through obstinacy and prejudice, to the exploded dogmas of the old-school, should be treated as a heretic, or receive the punishment of a Tantalus.

We feel confident that facts will sustain us in the assertion, that Eclecticism is *now* the only correct system, and we can safely predict that not twenty years will elapse before it becomes the universal practice. It is daily gaining ground. Our colleges are increasing and flourishing. Hundreds of Allopaths are yearly abandoning the old calomel system in disgust, and adopting our views and remedies—many, fearing ostracism, are doing so secretly. Through the influence of Eclecticism the lancet is discarded, and we are informed by reliable druggists that not one half the amount of mercury is now sold that was formerly. In some of the Allopathic journals we find podophyllin and leptandrin recommended as a substitute for calomel, and the former article is used in some of the New York hospitals. We are constantly receiving letters from all parts of the United States, begging us to send on Eclectic physicians. The demand is great—the people want more. It is flattering, indeed, to the old pioneers in the cause of medical reform, to see the doctrine for which they struggled so assiduously, at length gaining supremacy; and the younger members are encouraged to press manfully on, ever sustained by the assurance that they are enlisted in a philanthrophic cause, and are working for a positive good to their fellow men.

ECLECTIC PHYSICIANS WANTED.

We have received letters from parties at North West River Bridge, Norfolk Co., Va., and California, Madison Co., O., stating that Eclectic physicians are needed at those places, and desiring us to send them on. Physicians who desire to change their location, will find an opening at the above-mentioned places.

DIPTHERIA.

Diptheria, which has been so prevalent of late, raged as an epidemic in Rome, A. D. 380; Holland, in 1337; Spain, in 1600; Naples, in 1609; New York, in 1611 and 1771, when it was very fatal.

TINCT. BELLADONNA IN CHILBLAINS.

Dr. Bruce writes us that he has found the tincture of belladonna to be a radical cure for chilblains when applied before ulceration takes place. He directs that the feet be first soaked in warm water, and after they are wiped dry, the inflamed parts should be well painted with the tincture.

ECLECTIC MEDICAL SOCIETIES.

We are glad to see that our friends in various sections of the Union are organizing Eclectic Medical Societies for the purpose of consolidating their strength, and giving character and influence to their system. It is the surest means by which Eclecticism can be speedily made to occupy the position and command the respect which it deserves. Practitioners will materially advance their individual interests by taking active measures to accomplish such a result. Societies should be formed in every State. We clip the following from the *Worcester Spy*, and would urge physicians from other States to do likewise:

Eclectic Medical Convention.—Agreeably to a call issued to the "Eclectic Physicians of Massachusetts," a convention assembled at the Lincoln House, in this city, yesterday, at 11 A. M., for the purpose of forming an Eclectic State Medical Society. The meeting was called to order by Dr. F. H. Kelley, of this city; Dr. W. C. George, of Charlton, was chosen chairman, and Dr. Wm. E. Underwood, of Boston, secretary. After an animated discussion of the whole subject by medical gentlemen from nearly every section of the State, it was unanimously decided to form such a society, and Drs. Kelley, of this city, Allen, of Barnstable, and Perkins, of Boston, were appointed a committee to draft a constitution and by-laws, and report the same to the meeting; after which the convention adjourned for dinner.

At 2 o'clock the convention reassembled, and the committee chosen for the purpose, reported a constitution and by-laws, which, with some slight amendments, were adopted with great unanimity, and the "Massachusetts Eclectic Medical Society" was organized by the choice of the following officers: President, Dr. W. C. George, of Charlton; Vice-President, Dr. Wm. E. Underwood, of Boston; Secretary, Dr. P. W. Allen, of Barnstable; Treasurer, Dr. T. S. Perkins, of Boston; Counsellors, Drs. F. H. Kelley and H. W. Buxton, of Worcester; R. W. Geddes, of Winchendon; E. E. Spencer, of Templeton, and H. S. Dearborn, of Amesbury.

A very lively interest in the subject was manifested by all assembled, and, previous to the adjournment, the counsellors called a special meeting of the society, to be holden at the Winthrop House, Boston, on Wednesday, the 19th of September next, at 10 o'clock A. M., for general business purposes connected with the interests of Eclecticism in Massachusetts, and throughout New England.

A FEMALE POISONED BY A BED-BUG MIXTURE.

The captain of a boat on the Miami Canal, night before last, purchased about a quart of a bed-bug exterminator, which was composed of corrosive sublimate and brandy. The cook, a female, was quite fond of brandy, although she had no penchant for hydrargyri chloridum, as the sequel will show. One of the boatmen told her it was excellent liquor, and she believed him, drank, and would have died, but for the fact that Dr. H. D. Garrison, who was called upon immediately, succeeded in neutralizing and dislodging the poison by the proper use of antidotes. As corrosive sublimate is both colorless and tasteless, persons who sell it for a vermin exterminator, would probably do well to mix it with oil of turpentine, creosote, or something which would not detract from its merit, but would effectually prevent its use as a beverage.—*Cin. Daily Press.*

We have been informed by Prof. Garrison, that the treatment which resulted so satisfactorily in the foregoing case, is, in part, original with himself. It consists in administering a solution of sodæ bicarb., sufficient in quantity to decompose the poisonous salt and neutralize all the acid in the stomach. By this means carbonate of mercury, which is comparatively innocuous, is substituted for corrosive sublimate, and the stomach is prepared for the reception of albumen, which is the proper antidote to this formidable poison.

OHIO MEDICAL COLLEGE.

We understand that the trustees of the Ohio Medical College, in this city, have resigned—in consequence of their inability to "make up" a faculty.—*Daily Gazette, August 7.*

There is always some "fuss" among those connected with this institution. We suppose its want of success keeps the faculty and trustees in a bad humor, and when they have exhausted their catalogue of abuse against us, they pour out the rest of their venom against each other. If we had not existed to prop them up with an occasional notice, and formed a sort of outside pressure to keep them together, they would long ago have been *nowhere*. Indeed, they had nearly found that locality, and were becoming gloriously unknown, except to themselves, when the governor thought it time to interfere. The faculty has been remodeled, and we hope they will now do better.

OBITUARY.

It is our painful duty to record the death of Dr. Grover Coe. Our last number contained a contribution from his able pen. Our readers will remember it. He there gave a catalogue of his sufferings, which were many, but was highly flattered with the conviction that the waters of the Alleghany Springs would entirely restore his health. He left the latter place for the Sweet Chalybeate Springs, to seek the aid of its waters in the relief of laryngitis, with which he was attacked. In a day or two after his arrival, he died.

In his death, Eclecticism has lost one of its brightest lights and firmest advocates. Dr. Coe was remarkable for his enthusiasm in the cause of medical reform, and for the energy with which, notwithstanding his manifold disorders, he labored for its advancement. Possessing a clear, discriminating, and cultivated intellect, he carefully analyzed every subject to which he turned his attention; and his opinions, formed with logical accuracy, though not infallible, could always be relied upon as approximatively, if not absolutely true. He observed closely, but never jumped at conclusions hastily. His naturally acute perceptions, and thorough acquaintance with physiological laws, rendered him eminently qualified to observe and determine the true therapeutic action of remedies; and he has given abundant evidence of his ability in this particular, by his writings on the concentrated preparations. The profession is much indebted to his labors for reliable knowledge of the properties and uses of these medicines. Dr. Coe was enthusiastic, but not fanatical. Endowed by nature with strong prejudices and fine sensibility, he was a warm, staunch friend, and an enemy not to be despised. We deeply regret his untimely end. Cut off in the midst of a career of usefulness and honor, we feel that Eclecticism has lost a firm advocate and zealous laborer, and we fear his place can not be easily supplied. Our next number will contain a short biographical sketch of the subject of this notice.

BOOK AND JOURNAL NOTICES.

OUTLINES OF CHEMICO-HYGIENE AND MEDICINE; OR THE APPLICATION OF CHEMICAL RESULTS TO THE PRESERVATION OF HEALTH AND CURE OF DISEASE. By A. DALLAS, C. H., C. M. Toronto: Maclear & Co. 1860.

The above is the title and object of a little work of 116 pages, which has been kindly forwarded us by the author. We can say of this little book what we can not of many others—*we have read every word in it*, and we trust with profit. The *idea* of the book is to impress upon the practitioner the folly of giving, and upon the people the absurdity of taking, too much physic. The author very forcibly argues that disease can and should be cured, by establishing an equilibrium of the processes of nutrition, secretion, excretion and oxidation. If any function be deranged, it should be reinstated by proper bathing, diet, rest, exercise or air. The work is well written, contains many useful suggestions, and can be read with advantage.

JOURNAL OF HUMAN SCIENCE: Edited by W. BYRD POWELL, M. D. Terms, $2.00 in advance. Address the Editor, Cincinnati, Ohio.

This Journal is devoted to the subjects of Physiological Incompatibility and Phrenology. Dr. Powell is so well known, it is unnecessary to say a word relative to his ability. His discoveries have received the approval of the highest medical authorities, and the object of his present undertaking is to disseminate the truths of his long and careful observations as widely as possible. The subjects which he discusses are of vital interest to all. The number before us contains interesting articles on the Temperaments, with abundant illustrations. These are taken from eminent living men. Among them we find that of Ab. Lincoln, now a candidate for the Presidency. Dr. P. thinks he is not qualified to be Chief Magistrate of this Republic. He says:—"We do not doubt that Mr. Lincoln is an estimable citizen, but still we are sure that nature had no reference to the Presidential office when she modeled him." Dr. Powell's opinions are always backed by scientific reasons, and are scarcely ever wrong. Everybody should take his journal.

WINTER SESSION OF THE ECLECTIC MEDICAL INSTITUTE.

Our readers will please bear in mind that the preliminary lectures will commence in the E. M. Institute on Monday, the 1st of October—the regular lectures to begin on the 15th. By reference to notice on cover, all information necessary, relative to time, expenses, requisites, books, etc., may be obtained.

The prospects for a full class are flattering. We hope the friends of the Institute will bestir themselves, and send on as many students as possible.

W. K. Everson, M. D., one of the old and true friends of Eclecticism and the Eclectic Medical Institute, is about leaving our city upon a traveling tour. The Dr. has been giving special attention to the diseases of the eye and ear, yet he does not confine himself entirely to this class of diseases. Being well supplied with all the modern improved appliances not only for illustrating the diseased parts, but for their cure, warrants the opinion that he will give entire satisfaction to his patrons. He will also be consulted upon chronic diseases generally. We are informed by him that he will call upon as many of our class of physicians, during his tour, as his limited time will admit of. We bespeak for the Dr. a hearty welcome from Eclectic Physicians generally.

EDITORIAL ABSTRACTS AND CLIPPINGS.

Muriate of Ammonia in Nervous Cephalalgia.—(By Professor Barallier).—Professor Barallier, of Toulon, reports that within the last three years he has administered this substance in 259 cases of nervous cephalalgia, and with success in 202 of these. He gives forty-five grains, combined with mint-water and syrup of orange-peel, divided into three doses, to be taken at intervals of half an hour, amendment commencing after the first dose, and the third frequently not requiring to be taken. To prove effectual, however, the remedy should not be given at the very commencement of the paroxysm, but when it has acquired great intensity. This agent not only gives relief to the urgent pain of the paroxysm, but, after having been had recourse to on several occasions, diminishes the number and frequency of these. To be of use, it must not be indiscriminately used for every cephalalgia; and the result of the analysis of M. Barallier's experience leads to the following conclusions: 1. The muriate almost constantly dissipates paroxysms of idiopathic migraine, and of migraine consecutive to too abundant menstruation. 2. It is powerless in the hemicrania which is dependent upon irregularity or suppression of the menses. 3. It is tolerably successful in cranial pains dependent upon disorder of the stomach, and in the accidental cephalalgia frequent in women and feeble persons under the influence of sudden changes of the atmosphere, prolonged intellectual labor, or moral emotion. It operates beneficially in cephalalgias consecutive to repeated paroxysms of intermittent fever; those which are observed during the decline of severe fever, and in the course of the irritative period of typhus. —*Ibid.*

Tincture of Capsicum for Chilblains and Toothache.—(By Dr. A. Turnbull). — My plan of treatment is simply to saturate a piece of sponge or flannel with the concentrated tincture of capsicum, and to rub well over the seat of the chilblains, until such times as a strong tingling and electrical(?) feeling is produced.

This medicine possesses an extraordinary power in removing congestion, by its action upon the nerves and circulation.

This application ought to be continued daily until the disease is removed. Relief will be experienced on the very first application, and frequently there will be a total removal of the disease after the second or third. This, of course, depends upon the severity of the case. This embrocation, when rubbed, never produces excoriation, if the skin is not broken.

The manner of using it for toothache is by putting a drop or two of the tincture on cotton, and applying it to the part affected; the relief will be instantaneous. The following is the formula:—

℞.—Tinctura capsici cencentrata:
Capsici baccarum, ℥ iv.
Spiritus vini rect., ℥ xij.
Macera per dies septem et cola.

It may also be made with advantage by displacement.
—*Medical Gazette.*

Menorrhagia.—Dr. Burns recommends, in the Belmont Medical Journal, the following prescription for this affection:—

℞.—Tinc. cinchona comp. ʒ iij *f.*
Tinci cantharides, ʒ ij *f.*

M.—Dose, a teaspoonful three times daily.

Reduction of Strangulated Hernia.—In the Maryland and Virginia Medical Journal, Dr. Stockdell reports a case of strangulated congenital hernia in a child three months old, that was reduced without an operation, in the treatment of which there are some points of interest worthy of making a note of. *Taxis* was tried "under the full influence of an anodyne enema, followed by a warm bath;" also, subsequently, "under the influence of an *anæsthetic*," but entirely without favorable results. "A tobacco leaf was procured, and, thoroughly moistened with warm water, applied to the whole abdominal parietes. At one o'clock, its effects being only slightly perceptible in the pulse—the abdominal distension remaining unchanged,—it was removed, and flannel cloths, wrung out of a very strong, hot infusion of tobacco, directed to be applied in its stead, and frequently changed." The tobacco was continued from nine in the morning until seven in the evening, when the hernia was spontaneously reduced.

Cod-Liver Oil Panada.—We are informed by the Bulletin de Therapeutique that M. Bassi has recently proposed, under this denomination, a new method of exhibiting cod-liver oil, which has permitted this medicine to be taken, not only without reluctance, but with pleasure.

Take eight ounces of white bread broken in pieces, toasted at a moderately hot fire, throw them into a tinned saucepan with five pounds of water; boil down to one half; strain with slight pressure, and heat gently until the fluid assumes a gelatinous consistency; add 3½ ounces of loaf sugar and 2 ounces of isinglass. Remove the mixture from the fire, and allow it to cool; add 40 grains of tartaric acid, and mix.

The bread jelly being thus prepared, take—

Bread jelly, - -	4 oz.
Cod-liver oil, -	1 "
Cinnamon water, -	½ "
Essence of lemon,	12 drops.

Mix well in a glass mortar.

N. C. Med. Jour.

Chloroform in Midwifery.—Dr. Kidd states that in 1699 recorded deliveries in which chloroform was administered, "there was not the slightest accident or casualty traceable to the anesthetic," and that, in obstetrical practice, there has not yet been one well authenticated death from it.

A writer in the London Medical Times says, that Mr. Simpson uses annually, in his practice, no less than from five to seven gallon of chloroform.

Removal of the Tongue.—Dr. Choppin reports, in the New Orleans Medical News, the successful removal of the tongue, in a case of cancer, with the ecraseur. The operation lasted fifteen minutes, and was performed without hemorrhage. This is one of the kind of cases to which the ecraseur is admirably adapted.

Pills of Carbonate of Ammonia in Chronic Bronchitis.—(By Dr. John Williams, of Cork).—Dr. Williams recommends the following formula for administering carbonate of ammonia in pills, which, he says, are of great service in chronic bronchitis, and especially in those cases where the bronchial secretion is viscid and expectorated with difficulty:—

℞.—Ammoniaci, gr. ij.
Pulv. ipecac., gr. ½.
Morphiæ mur., gr. 1-6.
Ammoniæ carb., gr. ij.
Mucilaginis acaciæ, q. s.
M.—Fiat pilula.

The pills should be at once coated with a varnish of balsam of tolu, dissolved in chloroform, and they should afterward be kept in a bottle.—*London Pharm. Journal.*

On the Local Employment of Chloroform in the Reduction of Dislocations.—M. Orline, a French provincial practitioner, relates two cases of recent dislocation of the shoulder, in which rapid and painless reduction was accomplished. This result he attributes to having surrounded the shoulder with, and placed in the axilla, compresses imbibed with ten or twelve grammes of chloroform, these being applied two or three minutes prior to and during the attempt at reduction. In this way, he observes, assistants may be dispensed with (an important matter in country practice), and pain be prevented, without any danger being incurred.—*Moniteur des Sci. Mid., and Atlanta Med. and Surg. Jour.*

Removal of Stains of Nitrate of Silver.—(By T. Collins).—If a solution of cyanide of potassium be added to a solution of nitrate of silver, a whitish precipitate of cyanide of silver immediately occurs. This precipitate is perfectly soluble in an excess of the cyanide of potassium, forming a colorless solution.

Black stains produced by nitrate of silver on the skin, nails, teeth, and on linen, etc., brushed over with a solution of cyanide of potassium (eight or ten grains of the salt to ʒj of distilled water) are similarly acted on. They will disappear after one or two applications, if at all superficial); if even deeply seated in the textures, they may require several.

The cyanide of potassium is a cheap salt, and may be procured from any respectable druggist. The solution should be made fresh, as it is liable to spontaneous decomposition.—*Dub. Med. Press.*

On Syrup of Squill prepared with Diluted Alcohol.—(By J. S. Conrad.)—It has long been a custom of physicians to prescribe syrup of squill with a carbonate, when the effect of carbonate is desirable; which can not be done with our syrup prepared with acetic acid menstruum, without the loss of the acid gas. To the accomplishment of this end, I have prepared a formula as follows:—

Take of Squill, (powdered),	2 ounces troy.
Alcohol, -	3 fluid ounces.
Water, - -	1 pint.
Refined Sugar, -	2 pounds troy.

Mix the squill with twice its bulk of coarse washed sand, introduce into a percolator, and place a tin diaphragm on the top. Mix the alcohol and water, and displace till 12 ounces are obtained; add the sugar, boil, evaporate to 2 pints, and strain. This syrup has all the virtues of the squill in the same proportions as that by the Pharmacopœia, and if well prepared, presents the same appearance.—*Jour. and Trans. Maryland Col. of Phar.*

Sunken Nipples.—In the Medical Press for December 3d, in a lecture upon the "Management of the Puerperal Woman and her Infant, during the month," Professor Bedford has the following practical remarks:—

"It will sometimes happen that the nipple is quite sunken and flat, so much so that it will be impossible for the child to grasp it in its mouth. The consequence will be, that the mother is fretted and fatigued by the negative efforts of the infant; and this latter will be defrauded of what it has a birthright claim to—its natural nourishment. It is the easiest thing imaginable to remedy the difficulty. Take an ordinary pint-bottle with a long neck, fill it with hot water, then pour out the water and apply the mouth of the bottle immediately over the nipple; as the bottle cools, a vacuum is formed, and thus a powerful but equable suction is produced, which results in elongating the nipple. The bottle is then removed, and the child applied."—*Amer. Med. Monthly.*

Death of a Noted Glutton.—On Wednesday morning last, says the Baltimore American, of July 6, a colored man named Thomas Thomas, well known in the eastern section of the city as eating Tom, died at his house on Fip-penny-bit alley, near Eden, north of Baltimore street. He had partaken, the previous evening, of a large quantity of cucumbers, and on rising early on Wednesday morning, drank immediately of ice-water. In consequence he was seized with violent pains from colic, and notwithstanding the efforts of Dr. Healey, expired in two hours. He was in the eighty-eighth year of his age, having been born in 1772, four years before the Declaration of Independence. In his early life he was engaged as a stevedore, continuing that occupation until his advanced age compelled him to quit. He has been known to eat a moderate-sized ham with vegetables, etc., in proportion, at one meal. Six large loaves of bread, with more than a quart of coffee or tea, would scarcely suffice for his breakfast or supper. A good sized goose or turkey would disappear from sight in a short space of time. His daughter would prepare a plum pudding at stated periods, and cook it in a bushel bag. This would serve him and two others as a dessert. A number of instances wherein his voracious appetite has been tested have occurred. At other times he would be content with a more moderate share of edibles.

Indian Corn.—Dr. Gambling, in the Nashville Journal, has an article upon the use of Indian corn as a periodic. He recommends corn meal as a substitute for quinine, and states that he has used it in thirty cases of intermittents with favorable results.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*Scarlatina.* By Prof. J. F. JUDGE, M. D.

Few diseases spread more terror upon their appearance in any community, than *Scarlet Fever.* This is doubtless owing to the fact of its contagious, and frequently, epidemic character; its too often fatal termination, and the rapidity with which death not unfrequently follows upon the inception of the malady. Such being the case, every practitioner of the healing art must feel a deep interest in its investigation.

The first occurrence of the disease is shrouded in mystery; but that it existed in Europe during the sixteenth century, there can be but little room to doubt, for Ingrassias alludes, in 1556, to a disease which is at present supposed to have been scarlatina, while J. Coyttar, a physician of Poictiers, France, published an account of an epidemic occurring in 1557, the symptoms of which were similar to those of the malady in question. The epidemic during 1557 at Amsterdam, the description of which was given by Tyengius, must have been scarlet fever. From Wierius and Schenk we learn that a similar fever prevailed in Lower Germany in 1564 and 1565, while Ballonius informs us of its being epidemic in Paris as early as 1581. About this time, De Heredia described it under the name of *Angina maligna.* Carnevala, Nola and Sgambarti have left us accounts of the epidemic occurring at Naples in 1620, which was known by various appellations, but generally as "epidemic phlegmonous angina." It was probably scarlatina anginosa. From this time we frequently meet with accounts of the occurrence of the disease on the continent of Europe. The first clear description of scarlatina was given by Sennert in 1619. Then Winkler, in 1642, Welsch of Leipsic, and Schultze of Poland, each observed epidemics of this disease, and published accounts of it under the name of "malignant purpura," by which it was then known. Italian and Spanish writers mention the occurrence of a disease under the appellation of "garatilla" and "morbus strangulatorious," which, in all probability, was scarlatina. In England, during the early part of the seventeenth century, a disease prevailed similar in its general character to scarlatina maligna.

During the eighteenth century, the disease became more and more frequent in its occurrence, and its epidemic visitations proving extremely fatal, medical attention was aroused, and its nature and treatment became matters of investigation. During the early part of the last century, scarlet fever was variously named, and distinguished from other eruptive diseases, especially from measles and roseola, with the former of which it had too frequently been confounded. The labors of Heberden and Forthergill in England, contributed much toward establishing the distinct nature of this malady, but to Dr. Withering is due the credit of placing this fact beyond a doubt, for in his essay published in 1778, a clear diagnosis is established between scarlatina and measles.

In the United States, it first made its appearance in the town of Kingston, in the interior of New Hampshire, during the month of May, 1735. The first child attacked, died in three days. In one week afterward, three children, four miles distant, were successively attacked, and died. In August following, it appeared in Exeter, six miles off, and in September made its advent into Boston, fifty miles distant, although it did not occur in Chester, six miles west of Kingston, till October. It spread slowly toward the south and west, and was two years in reaching the Hudson river, a distance of two hundred miles west. Noah Webster states that "it attacked the young in the most sequestered situations, and without a possibility of communication with the sick, although the disease was very infectious;" also, that "for many years after it was epidemic, it frequently broke out in different places without any apparent cause, but did not spread." The epidemic, when it reached the Hudson, in 1737, continued its course onward till it had spread its pestilential breath over all of the British colonies; a very severe and fatal attack occurring in Philadelphia about the year 1746. Since the middle of the last century, the disease has been one of constant occurrence in Europe and the United States; while disappearing in one locality, making its advent into others, so that at the present day it is quite a familiar disease with the practicing physician, and a dreaded visitor to the family circle.

Scarlet fever is a specific disease, resulting from contact with a specific *poison* or *emanation* from a person already subject to the malady. In regard to the true nature of this poison, or the manner of its origin, we know little or nothing. What we do know, are the results which follow upon its reception into the system of a person *not previously* affected by a similar poison. These results, while they vary to some extent, both in their character and severity, still bear a sufficient resemblance in each instance to fully establish the specific character of the cause, and the identity of the resulting disease. Although contact with the poison appears to be essential to the occurrence of the affection, still surrounding circumstances tend much to modify the danger of the contagion and the severity of the disease when contracted. The chief predisposing circumstances appear to be a peculiar atmospheric condition, the nature of which is not well understood, and a want of vigor on the part of the individual attacked. The capacity of the blood and the nervous system to resist these peculiar changes and disturbances is very different in different individuals, as well as at different times in the same individual. It is also a well established fact, that age has much to do with the liability to infection, the period of greatest liability being between the years of two and seven, the risk of contagion decreasing as we approach the period of puberty, while adults are seldom subject to its ravages. In regard to its contagious character, there appears to be a general agreement of opinion, but at the same time it does not appear to be as universally contagious as either measles or small-pox; for the number of persons escaping scarlatina is much greater than those escaping either small-pox or measles. There appears to be some grounds for suspecting the possibility of scarlatina occurring without the reception of the specific poison which is presumed always to be necessary to its generation. The mass of opinion is, nevertheless, strongly opposed to the admission of the possibility of its occurrence, except by contagion. That the disease, when first occurring in the British colonies of North America in 1735, attacked its first victim in an inland town, far removed from all commerce with European society, strongly suggests the idea of its occurring without the presence of any specific poison emanating from a scarlatina patient, but, by virtue of the occurrence of the predisposing causes in sufficient force to give origin to the disease. This once occurring, became epidemic by virtue of the generation of a contagious poison by the child then subject to it. That *all* contagious diseases had an origin, must be admitted by every thinking mind; and, this concession made, it naturally follows that it may be possible for them again to originate without contagion whenever a similar category of circumstances shall simultaneously arise.

I do not desire to change the generally received opinion, but to show that more information is required before we can say that it is impossible for diseases, such as small-pox, measles and scarlatina to occur in any other way than by the reception of the emanations from a person already subject to the malady.

The means by which the poisonous emanations from scarlatina patients are conveyed to uninfected individuals, are the atmospheric air, which becomes more or less impregnated with the poison, depending upon the facilities for ventillation, humidity, currents of air, etc.; and fomites or substances capable of absorbing and retaining for a time, either the poison or the air which may be impregnated with it.

In regard to the distance to which the contagion may be conveyed by atmospheric means, nothing is fully established. In some instances, hospitals and schools have been exempt from the spreading of the contagion by removing the affected patients to a separate apartment, and avoiding, as far as possible, all communication between it and the remainder of the building. On other occasions, this means of avoiding its communication has utterly failed; but the failure in these instances appears to be due rather to the conveyance of the disease by fomite than by atmospheric means. That fomites retain for a time the power of infecting the healthy individual is a fact, but in regard to the duration of this capacity to infect, there is no established rule. Experience teaches us that when fomites are freely exposed to strong currents of air and an elevated temperature, the period of their retaining the infection is very much shortened; while the retention is promoted by allowing feather, hair, or woolen beds and clothing to remain undisturbed; these, if not thoroughly exposed to warm air, may for many weeks retain the poison, and under favorable circumstances may communicate the seeds of the disease.

It may be stated as a general rule, that susceptibility to the scarlatinal contagion is *entirely* exhausted by the full development of the disease; that those once affected by the malady, are, in future, proof against its infection. To this well established law there have been instances of exception, for a number of cases are recorded which establish the fact of occasional recurrence of scarlet fever in the same patient; but the infrequency of such cases is quite as great as in small-pox, the recurrence of the disease being in the proportion of *one* in *two* or *three* thousand cases.

Scarlet fever may occur in conjunction with measles, small-pox, vaccine disease, erysipelas, etc., many clear cases being on record of patients being attacked simultaneously with the symptoms of scarlet fever, and either measles or small-pox.

The predisposing or accessory causes of the disease are, peculiarity of constitution, or state of the individual's health at the time of exposure, and age; the latter appearing to exert a very remarkable influence over the susceptibility to scarlatinal infection. The seven years of childhood embraced between the commencement of the second and the termination of the eighth year, are those of most danger, after which the liability to infection gradually decreases till just after puberty, when the individual may feel himself almost exempt from its influence; but cases have occurred a few hours after birth, and others at adult age.

The period of incubation, or latency, is, as might be anticipated, liable to variation. It may not exceed one, or ma-extend to twenty-five or more days, but the usual period is three to four days, being seldom less than two or more than eight. The variation is due, probably, to constitutional peculiarities, other predisposing causes, or to the smallness or greatness of the dose, or concentration of the poison.

Scarlatina, when of the regular type, may be readily separated into three clearly-marked stages. 1. The period of invasion, or latency. 2. That of eruption or efflorescence. 3. Of desquamation. Complicated and irregular cases frequently occur when the stages may blend or run so rapidly into each other as to prevent any such discrimination. It will be well here to enumerate the characteristic symptoms of the regular or *normal* type, and afterward those deviations which are occasionally remarked.

First stage.—The period of invasion commences with symptoms similar to those of other eruptive fevers: general uneasiness, giddiness, headache, lassitude, loss of strength, general depression, loss of appetite, nausea upon taking food, chills, shiverings and rigors. These are followed by sense of heat, hot skin, intolerant thirst, rapid pulse, increased headache and pain, redness and swelling of the throat, rendering swallowing painful and difficult. In more violent cases, there may be vomiting, pains in back and limbs, redness of the eyes and intolerance of light, sleeplessness and delirium; and in the very young, convulsions may occur. There is always fever, though it may be but slight, at the period of the occurrence of the angina; it is often severe, the pulse becoming rapid and full, the skin dry, very hot, and the face suffused, and sometimes swollen. While the nostrils, fauces and mouth are being involved by the inflammation, the tongue presents symptoms which are very characteristic of the disease: At first it is covered with a thick grayish-white fur, bordered by a bright red margin; as the disease advances, the fur gradually disappears, and the red and elongated papillæ protrude through what remains, till finally the whole disappears, and the tongue presents a preternaturally red appearance. The bowels are generally constipated or irregular; the urine scanty, high colored, sometimes albuminous, and is frequently voided. These symptoms may last only one day, the usual duration, or may be prolonged to three or four, the eruption not occurring till the third or fourth day, or may be reduced to a few hours, only serving to usher in the angina or eruption. Sometimes the symptoms of this stage are very slight; at others, very severe.

Second stage.—The occurrence of the eruption marks the advent of the second stage of the disease. This usually takes place the second day, but may occur earlier, or be protracted till the third or fourth day. The eruption usually shows itself first on the neck and cheeks, and then spreads over the body; but sometimes it makes its appearance first on the breast or limbs, and then invades other portions of the surface. The eruption consists of many small red spots or points, marked upon a roseate ground, and are collected into irregular patches, which gradually enlarge, and finally running together, coalesce and present a uniform bright scarlet appearance of the entire surface. The points, although distinctly visible, are not discoverable to the touch, and hence are not elevated. After the complete invasion, the skin becomes somewhat tumefied and rough, and intensely hot and dry, there being considerable congestion of the cutaneous and subcutaneous tissues. At this period, the inflammation of the fauces and pharynx, and the swelling of the tonsils are much augmented, often occasioning considerable obstruction of the throat. The swollen tonsils are covered with a thin, soft, grayish exudation of lymph. It is during this stage of the disease that the tongue loses its fur and puts on the bright red and glassy appearance; sometimes the papilla become elongated and present many prominent red points, erected upon a livid red ground.

The eruption has usually attained its hight by the second or third day of its appearance, and is most marked about the axilla, groins and flexures of the joints. While the face and hands may present a uniform scarlet hue, much resembling a boiled lobster; the eruption on the body and limbs is usually distributed in irregular patches. The redness of the skin is generally diminished in the morning, but gradually increases toward evening, when the fever is most violent. It is also subject to be augmented by any excitement, as crying, and abates upon quiet being restored. The temperature of the surface is very much elevated, attaining, in some cases, to 104 or

106 deg. Ft. The skin generally retains its dry and parched character through this stage of the malady.

The countenance generally indicates anxiety and pain; the eyes are frequently very brilliant and sensitive; headache, delirium and sleepiness often set in and add to the category of suffering. Sometimes the swelling of the throat becomes very severe; the exudation of lymph increases in viscidity, as does the scanty salivary secretion, rendering the throat and mouth dry and parched. The breath is hot, respiration more frequent and difficult, while the thirst becomes most intolerant and oppressive. The efflorescence generally begins to fade about the fifth or eighth day, assuming a livid and afterward a mild roseate hue. The swelling about the neck and fauces diminishes, as does the redness of the latter, but the angina may continue several days after the disappearance of the eruption from the surface.

The third stage, or that of *desquamation*, commences in the mild varieties at the fourth or fifth day, but in those attended by much fever and eruption this does not take place before the seventh, eighth or ninth day. When the redness of the surface is disappearing, the process of desquamation sets in. Sometimes it is not attended by any febrile symptom; at others, by slightly accelerated pulse, copious discharges of sedimentary urine, free perspiration, or, in females, by the return of the menses. The pulse becomes less full, soft and weak; the tongue clean, red, soft and flaccid, and does not regain its normal condition until the inflorescence of the fauces has disappeared.

As desquamation advances, the functions of the skin become reinstated, and assist in eliminating the debris of the tissues, thus facilitating convalescence. Sometimes the bowels are not restored to their condition, and diarrhea occurs to retard recovery; the urine may become albuminous; the sight may be impaired; deafness, dropsy, and many other unpleasant sequelæ may exhibit themselves at this stage, and the health of the patient may become permanently impaired in consequence.

Varieties.—This disease is liable to exhibit itself in forms or types extremely various; in some cases, the patient is scarcely conscious of any deviation of the health from the normal standard, while in others it is so malignant as to prove fatal in from fifteen to thirty hours. The cases met with, although perhaps differing each from the others (as is the case in all diseases), may readily be classified under some of the four following divisions: scarlatina simplex or mitis, anginosa, maligna, or sine exanthemata.

Scarlatina simplex.—Mild or simple scarlet fever is characterized by only moderate fever in the great mass of cases, though it is sometimes severe; the efflorescence makes its appearance in from twenty-four to forty-eight hours from the inception of the disease, and, continuing from three to six days, terminates in desquamation on the fifth or seventh. There is little or no affection of the mucous membranes of the mouth, fauces, nostrils or eyes; this absence of or only moderate involvement of the throat, is the main feature of this variety. Although in this form there may be only moderate febrile action, little involvement of the throat, and freedom from symptoms of visceral disturbance, still there is danger of unpleasant sequelæ, that most likely to occur is disease of the kidneys. This liability is much greater in epidemic cases when the general occurrence is of a graver type than when the simple is the prevalent form. It is therefore necessary that the medical adviser of the patient should be ever watchful in the third stage of the disease, and ready to meet any irregular symptoms which may arise. Even when every exertion is made to avoid it, unpleasant sequelæ may arise.

Scarlatina anginosa presents every phase, from the simple to the malignant form, and is subject to very serious and varied complications. The fever is commonly severe, even before the eruption occurs, and remains intense for some days after that takes place. It is ushered in by severe stiffness of the joints, rigors, sore throat, and redness of the fauces and pharynx, with difficulty in swallowing. The tonsils are swollen, and, together with adjacent parts, covered with a grayish, thick and adherent lymph, which is secreted by the mucous follicles. The salivary secretion is also thick and adherent. The eruption usually does not occur till the third or fourth day, or may in some instances make its appearance the first and disappear prematurely, then return in regular patches, or may not make its reappearance, or it may continue with great intensity and severe itching, even beyond the usual limit ascribed to its duration. The irregularities of the eruption are dependent upon the extent and character of internal complication. The thirst is great; the heat intense, rising to 104 or 106 deg. Ft.; the pulse are much excited, strong and full, seldom hard and constricted. The fever increases toward evening, and delirium frequently follows. The throat is now more extensively involved, and deglutition is either impeded or entirely obstructed. The inflammatory action may involve the mucous membrane of the nostrils and eye-lids, and even pass up the eustachian tube to the ears, and occasion organic lesions of the internal ear. About the third or fourth day, if the eruption has appeared and subsided, there is great danger of inflammation or congestion of some internal organ or organs. When this is the case, it may entirely prevent the recurrence of the eruption, or render it irregular or incomplete. Sometimes there may be a few dark patches on the hands, feet or limbs, indicative of the internal complications. The mucous membranes of the stomach and bowels, the lungs or brain, and the pleura, peritoneum and pericardium may exhibit morbid action; the kidneys are not so liable to be involved till later in the disease, or during convalescence. The urine is scanty, high colored, and even bloody, and frequently voided. There is much pain in the loins and back, and a tendency to septic action in the throat and other congested localities. While this type of the disease is liable to many complications of vital organs, and irregular inflorescence, yet it frequently follows the regular symptoms of the normal form, already described.

Scarlatina maligna may commence with similar symptoms to those met with at the inception of the last described variety; or, as is more frequently the case, with symptoms indicating an asthenic or typhoid condition. The disease may be ushered in by languor, weakness, aching of the joints, and a vague sensation of weariness. Then may follow giddiness, rigors, and intense heat, which may alternate for some hours, when the fever becomes established and very hot. The patient now suffers from headache, nausea, vomiting and purging—frequently, if children, less frequently, if adults. The throat becomes hot and sore, the neck stiff and inflamed; the face may be either red, flushed, swollen, or pale and flaccid; the eyes red and dull, and the spirit depressed. The pulse may be small, quick and irregular, or full, soft and weak, always showing less strength and firmness than in inflammatory diseases. Quite early in the disease, the pharynx, uvula, fauces, and adjacent parts assume a red and swollen appearance, and soon after are covered by an ashy-gray exudation which frequently covers sloughing ulcers. The tongue is now red or brown, dry, glazed or cracked; throat rapidly assumes a dark or livid hue, the exudation becomes darker and frequently covers gangrenous ulcers; the teeth, gums and lips are sometimes covered with sordes; the urine may at first appear light and cloudy, later may assume a yellow hue, as though containing diluted bile, and later may become high colored, scanty or turbid, sometimes containing disintegrating blood globules.

The eruption may show itself on the second, third or fourth day, as a regular efflorescence, and shortly disappear, or may be in irregular patches on some parts, as the hands, resembling raspberry stains; when it is general, it may be dark or livid, and be accompanied by ecchymosis or œdema. The submaxillary and parotid glands swell, and are a source of pain; the throat and neck become swollen, and swallowing difficult, while the respiration is impeded or entirely arrested, causing death in some cases by suffocation. Severe sloughing of the tissues of the fauces and adjacent parts may occur, as well as ulceration of the inner ear, with destruction of the bones of the tympanum, together with that membrane.

The febrile action is of a low grade, or typhoid in character, and is accompanied by coma in the young, and derilium in adults. In the most severe cases, the efflorescence disappears or becomes livid, the fauces black, the breath putrid, the eyes dull, and the neck more swollen. The stools and urine are involuntary; the former are offensive, frequent, and watery; the latter dark, turbid, or suppressed. The surface becomes cool, the countenance cadaverous or bloated, sometimes œdematous, the tongue brown, dry or hard, the breathing is more labored, and death occurs. This may take place in eighteen hours from the commencement of the attack, or on the second, third, or a later day.

Scarlatina sine exanthemata, is a term used to indicate a variety of scarlet fever, possessed of symptoms which differ in no respect from those of the anginose or malignant forms of the disease, except the absence of any eruption or efflorescence. The scarlatinal character of the affection is readily recognized by the throat and mouth being affected in the characteristic manner, the fever, and the prevalence of the disease in an epidemic form at the time, perhaps, in the same family.

Occasionally parties become affected by scarlatinal poison, and are so slightly disturbed by its febrile, anginose and eruptive symptoms as to fail entirely to recognize the occurrence of the disease. Such cases occasionally occur during severe epidemics, and are frequently followed by serious sequelæ, often dropsy, and especially, anasarca may set in, and be the first symptom which arrests the attention. The non-eruptive variety occurs more frequently in adults than in children.

(*To be continued.*)

ART. II.—*Stray Notes on Practice.* By JOHN M. SCUDDER, M. D., Professor of Theory and Practice of Medicine in the Eclectic Medical Institute.

Complete Retroversion of Uterus.—Mrs. B——, aged 28, had suffered for some six months with distressing bearing-down sensations in the lower part of the abdomen, which, for the last three months, had increased so that she was obliged to lie down every two or three hours in order to get ease. Her bowels were constipated the principal part of the time, with an almost constant desire, however, to go to stool. Occasionally she would have a small evacuation of the fæces with mucus, but which always aggravated the tenesmus. Urine was passed with difficulty, and with much burning and an intense desire to evacuate the bowels. She had consulted a *semi* physician, who told her that it was an effort of nature to bring on the menstrual discharge (she not having had them since the birth of a child, over two years previously), and that medicine to rectify that would bring her round all right. This medicine she had been taking some eight days previous to my being called.

July 4.—Sent for in great haste, as the lady had copious hemorrhage and excruciating pain in lower part of the bowels. On inquiry, I found that the pains were partially intermittent, somewhat resembling labor pains, though she would not entertain the idea for a moment that she was pregnant. On examination, my finger first came in contact with a rounded mass which appeared to fill up the entire lower part of the pelvis. For some considerable time I was unable to make out anything further; but at last, after considerable exertion, the index finger was passed between it and the symphisis pubis, discovering the os uteri, which made plain the condition of affairs. It might, in truth, be called a complete retroversion, with considerable prolapsus of bladder, and pregnancy advanced to the fourteenth or fifteenth week.

The case seemed like a desperate one—the size of the uterus—its complete retroversion—the interference of the bladder—the hemorrhage, and, in addition, the bearing down of the woman when the slightest pressure was made upon the parts. I tried first to replace the uterus with the hands, elevating the hips some two feet higher than the head, without the least effect; gave the patient chloroform, but without any good result.

Having signally failed with all the common measures, I resorted to a modification of the treatment recommended on page 360 His. of Woman:—A piece of hickory wood, about half an inch in diameter, was nicely smoothed, and a lock of cotton, sufficient to make a pad of about an inch in thickness, placed on one end, and a thin piece of leather drawn over it and securely tied. This I introduced next to the recto-vaginal septum, the padded extremity being brought against the fundus-uteri, making pressure forward and upward; the index finger of the left hand was passed up and around this so as to draw it down. With steady pressure in the one direction, and drawing down in the other, I had the satisfaction of placing the organ in its original position. In a couple of hours, the fœtus was discharged, and the woman quite comfortable, with the exception of the urinary difficulty.

Are there any Specifics in Medicine?—This is a disputed question; but if there are, I wish to place another remedy in the list.

We find many cases, in treating diseases of women, where the patient complains greatly of difficulty in passing her water, of a burning sensation during and after its passage, or an intense tenesmus at such times, and we can not many times discover any lesion of either bladder or urethra. In such cases, I invariably prescribe *Santonine*, triturated with an equal part of loaf-sugar—*dose*, gr. v. to x.—with the most satisfactory results.

In the case above named, four doses at intervals of two hours, were sufficient to entirely relieve the irritation.

While speaking of this agent, it may be well to notice another case in which it is advantageously employed. It is well known that in some diseases of children—I might say in all, where the little patient becomes much reduced—there is a tendency to retention of urine; and I doubt not but that such retention has been the cause of death in many cases. Here the santonine and sugar, given in doses of two or three grains every hour or two, has, in my hands, invariably succeeded in producing free discharge of urine.

I have also tested it in two cases of retention of urine in typhoid fever, with the most gratifying results.

Make a note of this, and try it.

ART. III.—*The Young American Jessup, of Rush county, Indiana.* By J. W. MAPES.

MR. SAMUEL JESSUP, of Heckington, Lincolnshire, England, swallowed, in 21 years, 226,934 pills, supplied by a highly respectable apothecary, by the name of Wright, at Bottsford. This is at the rate of 20 pills each day. During five years of his life, he took the pills at the rate of 78 each day; and in one year he swallowed not less than 51,590 pills, and 40,000 bottles of other mixtures, jalaps, and electuaries, during the 21 years.

In running over the columns of the Cincinnati *Weekly Gazette*, of May 14, my eye fell upon the above remarkable history of Mr. Samuel Jessup, which reminded me of George Culbertson, a young man who has swallowed an almost incredible amount of patent medicines, and yet he is still a living monument of the wonderful power of the human organism to resist the combined forces of disease and patent quackery.

Without entering into any comments on the subject, I will give a history of his case in his own words, as I have been kindly furnished with a catalogue, in his hand-writing, of the medicines used by him in less than three years:—

"I commenced in March, 1856, with three bottles of Hall's Balsam; from that time to December, 1858, I took 12 bottles of Wistar's Balsam of Wild Cherry, 7 of Ayer's Cherry Pectoral, 39 of Jaynes' Expectorant, 20 of Jaynes' Alterative, 12 of L. O. Richardson's Sherry Wine Bitters, 7 of Hoofland's German Bitters, 2 of Temple's Hops and Bone-set, and 5 quarts of cough medicines; ½ lb. rhubarb, 10 boxes of Quinine pills, 5 boxes cathartic pills, with a score more of doctors' medicines; 2 gallons of apple-tree syrup and flaxseed, 4 lbs. of gum arabic, 4 gallons rye whisky, ½ lb. cubeb berries, 1 lb. of soda, 1 gallon of wine.

"I have gargled in my throat, 1 quart of blood-root, 1 gallon of camphor, 2 bottles of Gregory's Instant Cure of Pain, 1 of Ward's Liniment, 1 of Rogers' Liniment, sugar of lead, zinc, yellow root and alum, red pepper tea, vinegar, Cayenne pepper, and 20 gallons of oak-ooze.

"I used Irritating Plaster three months, 1 bottle of Jaynes' Counter-Irritant, 1 gallon of liniment, 1 gallon alcohol, camphor, and lots of cold water.

"To Mr. W. C. Smith. George K. Culbertson."

Mr. Wm. C. Smith informs me that since using the above medicines, he has been using medicines from a German urine-doctor, near Brookville, Indiana, for fifteen months, at the rate of 2 or 3 bottles every two weeks, until the doctor would not give him any more; so he had to quit.

Here is a query for experts. What could have ailed the man, and what would be the result of such treatment?

I would state here that I have been personally acquainted with Mr. Culbertson, and most of the circumstances connected with his case during all this time.

I have several other cases in my practice, that have tested the evil effects of patent medicines, which I may refer to hereafter. I am happy to state, however, that not one fourth of the patent medicines are sold now that were sold here four years ago. Patent medicines, a few years ago, were a source of considerable income to our merchants, but now they are a drug, and they are ridding their stores as fast as possible of that unprofitable stock.

A little more practical knowledge among the common people, and patent medicines and *regular* quackery will be driven from the land.

ART. IV.—*Rupture of the Uterus.* By D. S. FREEMAN, M.D.

As this serious and generally fatal accident is not of frequent occurrence, and still less frequent recovery, but liable to occur in the hands of all who practice obstetrics, I thought a report of this case would be interesting, if not instructive, to some of the readers of the Journal.

July 17, '60.—I was called in haste to see Mrs. Collum, aged 41 years, in her sixth accouchment, between the hours of 5 and 6, P. M. On my arrival, I was informed there was a plurality of children, one having been born half an hour or more before I arrived, and both hands of another were then presented. I learned that she was taken with pain while preparing supper, which increased very rapidly until the first child was born, about half an hour after the first pain. From this time the pain was continued without intermission, of a crampy character. On examination, I found an uneven surface of the abdomen, irregular uterine contraction, with both hands of the child in the vagina, and the epigastric region next in reach. By this time my diagnosis was formed, as above. I intimated the same to the husband. She being in great distress, I gave an ordinary teaspoonful of laudanum, and gave by inhalation chloroform and sulph. ether, *a.a*, for a few minutes. The urgency of the case not allowing time to send for counsel, I proceeded to deliver by turning. I found the head had passed through the uterine walls, and was resting in the left iliac region. I then introduced the left hand to bring down the feet, it being somewhat difficult, on account of the transverse position of the child, and the feet being high in the right side. By careful manipulation I succeeded in bringing the feet down, and soon completed the delivery of the child, it being dead.

I now found the uterus high in the right hypochondriac region, with excessive hemorrhage. I immediately prepared and gave one drachm of Secale Cornutun, and in a few minutes proceeded to get the placenta. In following the cord with the right hand, I found the rupture beginning at the os and upper part of the vagina, opposite the left sacro-iliac junction, extending to near where the placenta was firmly attached in the fundus uteri. I carefully detached the placenta, and as I withdrew the hand with the placenta, the uterus resumed its position in the abdomen. The hemorrhage being considerable, I applied a bandage firmly around the abdomen, and ordered it kept wet with cold water during the night, and ordered ½ gr. doses of Act. Morphine every two hours, provided she had great pain, and left my patient, with but little hope of her recovery.

18.—In the morning, I found my patient sitting up in bed, unable to lie down; had not rested any during the night. She complained of pain from the epigastrium, through the thorax to the shoulder, with very difficult inspiration. The bowels were much bloated and tender; has had great edema of the feet and legs for several weeks. Wet the bandage with Tinc. Arnica Flowers. Use cold.

℞.—Tr. Veratrum Viride.
" Gelseminum, *aa.*

Mix. Give three drops every three hours during the day.

Evening.—Patient is no better; pulse was 115 this morning; 120 now; has not been able to take the recumbent position.

Continue the drops; keep the cloths wet in the arnica to the bowels; give a tablespoonful of Castor Oil this evening, and repeat every four hours until the bowels are moved.

19, evening.—Patient has slept some; can lie down part of the time; pulse 110; has taken five portions of Oil; bowels have not moved; urine scanty; bowels much bloated and tender.

Continue the same treatment, except the oil. Give one teaspoonful of Beach's A. B. Physic, with the same of Cr. Tar.; repeat in four hours, if necessary to move the bowels.

20, morning.—Patient feels much easier; can lie down most of the time; the bowels, after taking two portions of the physic, have been freely evacuated, the discharges being large, with great amount of serum; has urinated freely; pulse 100.

Give the Veratrum and Gelseminum as before. Also, a powder of Ipecac 1 gr., Nitra. Potas. 2 grs., every four hours; for drink, 1 teaspoonful of Cr. Tartar in a tumbler of cold water; tighten the bandage, and keep it wet with a decoction of Arnica Flowers and Smart-weed, cold.

21, evening.—Patient feels quite easy; the bowels have moved three or four times; urinates freely; bloat and tenderness of bowels subsiding; pulse 90. Continue the treatment.

22, evening.—Improving; pulse 90. Continue the same treatment.

23.—Pulse 85, full and soft; bowels not so tender; bloat subsiding in the bowels and limbs; the patient is easy and encouraged. Continue the same treatment.

30.—Was doing well until last evening; she had a severe chill in consequence of taking cold the night before from an open door; pulse 120; has headache, and swelling with pain in the left breast.

Treatment.—Give a teaspoonful of Beach's Antibilious Physic; bathe the breast with Camphorated Liniment, and apply a flannel cloth, wet in warm decoction of Smart-weed; over that apply a tin basin of proper size, and apply to that a hot flat-iron for one or two hours; bathe the breast with the Liniment, and keep it warm; give Veratrum Com., as before.

Aug. 1.—No more chill; pulse 85; patient is doing well; continues to improve from day to day.

Aug. 8.—Discharged.

Remarks.—I think the treatment was well adapted to this case. I have thought the sitting posture for the first 24 hours was advantageous, in allowing free exit to blood, lochia, etc., as also to keep the uterus in proper position for the healing process. In her former accouchments, she was much troubled with after-pains. She had none this time. The uterus being ruptured when I arrived, I suppose the accident occurred before or during the expulsion of the first child.

Randolph, Crawford Co., Pa.

PART SECOND.

SELECTIONS.

Pain as a Sign of Disease in the Stomach.

At a meeting of the Medical Society of London, held November 14th, the following paper was read by Dr. Habershon:—

The author first spoke of the general absence of pain in disease of the mucous membranes, except where the orifices of their canals were affected; and of the very frequent immunity from actual suffering in many morbid states of parenchymatous viscera. But in serous membranes an opposite condition was found to occur, almost any change, and especially those of a sudden or acute kind, being accompanied by severe and agonizing pain; and of such a character and severity as to demand perfect rest, this rest being a very essential element in the alleviation of the disease. In pericarditis, on the contrary, when occurring without pleurisy, pain was very frequently entirely absent, as for many years shown by Dr. Addison; and rest in this case would be impossible. The immediate object of the communication being the consideration of *pain* in connection with *disease of the stomach*, he proceeded to show its value as an indication, or non-indication, of disease of that organ, by several propositions:—

1. That acute so-called inflammation and disease of the stomach may be entirely free from pain, if the mucous membrane only be affected. Reference was made to the gastro-enteritis of children, and to the symptoms of irritant poisoning.

Several instances were adduced, in one of which a large dose of oxalic acid was taken; and except pain in the mouth and throat, there was no suffering, but the patient completely recovered. In a second, a case of poisoning by surphuric acid, the patient lived eleven days; but, except that arising from the action of the acid on the mouth and throat, there was no evidence of suffering, or of pain, tenderness, etc., at the stomach. The whole of the mucous membrane was destroyed, but the deeper structures were uninjured. In a third case, one of poisoning by a solution of chloride of zinc—Burnett's disinfecting fluid—no pain whatever was suffered for three months; but eight days before death pain came on in the left side. Ulceration of the mucous membrane was found near both orifices; near the œsophagus was an opening into an abscess between the spleen and diaphragm; and near the pylorus extravasation was prevented by adherent omentum. It was believed by the author that this abscess had only dated from the commencement of the pain eight days before death, when probably the deeper structures had become involved.

2. That organic disease of the mucous membrane alone—as, for instance, cancer—may be comparatively free from pain. Reference was made to the detection of cancerous secondary tubercles without previous symptoms; and a specimen was shown of a large villous growth from the mucous membrane of the stomach, of which no idea had been entertained, the orifices being free, vomiting absent, and no pain being present for many weeks before death. The patient died from advanced cirrhosis, and at the commencement of her illness had complained of burning pain at the stomach.

3. That disease extending to the muscular or peritoneal coats, produces generally severe pain, as in ordinary ulceration or cancer. Two instances were given in which the intensity of the pain was the most prominent symptom, and in which, after death, the author had detected branches of the pneumogastric nerve involved in the dense fibrous edges of chronic ulcers.

4. That over-distension of the stomach produces severe pain.

5. So also disease of the peritoneum covering the viscus.

6. The statement of Dr. Osborne, that the precise seat of

gastric ulcer might be shown by the position of greatest ease, was briefly alluded to; but the author did not give a positive opinion on the subject. In the case mentioned where the pneumogastric was involved, and the ulcer at the posterior aspect, the patient was most comfortable when leaning forward and toward the left side, so far confirming Dr. Osborne's opinion.

7. That in disease of the lesser curvature near the pylorus, pain is sometimes experienced by the patient as soon as the food enters the stomach, and, in some cases, conveys the idea of disease at the œsophageal orifice. An instance was mentioned where, for many months, the affection was believed, by an eminent physician, to be at the end of the œsophagus, whereas the lesser curvature near the pylorus was only affected, and the mucous membrane near the œsophagus was perfectly free.

8. That many conditions of functional disease are entirely free from pain.

9. That the pain in many so-called functional diseases is often exceedingly severe, but is often produced by a mal-condition of the nerves or nerve centers, and arises from the intimate connection of the spinal and sympathetic nerve. Reference was made to the severe dyspepsia occurring in states of exhaustion, extreme nervous prostration, loss of blood, over-anxiety, and uterine disease.

10. That the effect of diseased condition of the pneumogastric nerve at its center or peripheral branches, in connection with stomach disease, is one of great interest, and it is probable that pain is sometimes the result. The irritability of the stomach in cerebral disease, in disease of the supra-renal capsules, the dyspepsia in phthisis, etc., were alluded to, and several drawings of the nerve supply of the stomach shown.

11. That in many forms of functional disease of the stomach, accompanied with severe pain after food, *it was probable* that extreme irritability of the pyloric orifice existed.

12. That in functional, as in organic disease, pain often arises from distension of the stomach consequent on chemical decomposition of the alimentary mass.

13. That absence of pain is sometimes found in consequence of the destruction of the pneumogastric nerves. An instance

was given, where the whole of the lower part of the œsophagus was destroyed, the pneumogastric nerve exposed, and many branches truncated; fluids had passed into the posterior mediastinum, had burrowed beneath the diaphragm, and made an abnormal opening into the stomach. The patient had traveled, a few days before death, to Guy's Hospital from the North Foreland, and scarcely any pain was complained of, notwithstanding this extensive mischief.

14. That pain in the scrobiculus cordis, simulating disease of the stomach, often arises from spinal disease, the pain being referred to the extremity of the irritated nerve.

15. The severe pain at the scrobiculus cordis, also simulating disease of the stomach, is referred by some, and probably correctly so, to over-distension of the cavities on the right side of the heart, as we find in mitral valve disease, chronic bronchitis, etc. In these instances, the whole of the chylopoietic viscera and the branches of the vena porta are much congested, and the functions of several viscera imperfectly performed.

16. That cancerous disease of the stomach, with enlarged glands, pressing upon the aorta, may be simulated by aneurism. In the latter disease, pain is sometimes very intense; and a case was referred to by the author, in which the patient died from the intense suffering, the false aneurismal sac not having given way; and, in dissecting the parts, the large branches of the sympathetic were found by him stretched out upon the sac. No other cause of death was found, after careful examination.

The author stated that these propositions were submitted to the Society not with the idea that each was established, but as guides for further thought and observation.

[*Lancet—Boston Journal.*

Clinical Lecture on Tetanus. Delivered at University College Hospital. By John Erichsen, Esq., Surgeon to the Hospital.

Gentlemen: The case to which I wish to direct your attention to-day, and to which I propose to append some remarks on the subject of tetanus, is that of a boy named B——, aged thirteen, who was admitted into this hospital on the 12th of December last, on account of sacro-iliac disease. I shall defer any observations which I may have to make on the affection for which he came to us until a future day, when the case will be taken in conjunction with other cases of sacro-iliac disease. But this case is of more special interest, inasmuch as, while here, the boy was seized with symptoms of tetanus, and eventually died of that affection.'

The following are some of the leading facts of the case:—The boy, who appeared healthy and well nourished, and did not seem to labor under any congenital or constitutional predisposition to disease, became affected six weeks before admission with symptoms of sacro-iliac disease. On admission, nothing unusual presented itself in the symptoms, and our diagnosis was made at once. In the ordinary course of treatment, an issue was made, by means of potassa fusa, over the back of the articulation, in the usual way. After the separation of the slough (about the fifth or sixth day), a couple of issue-beads were applied to the ulcerated surface, in order to keep it open and cause a discharge. So far there was nothing to lead us to suspect the coming evil. On Dec. 24th, the report states that the patient had some stiffness about the jaws, and inability to separate them; there was also some commencing tension about the sterno-mastoid, and some spasmodic action of the muscles of the neck; in fact, on the 24th he was seized with symptoms of the invasion of tetanus. These symptoms increased, the muscles of the trunk and extremities became convulsed, symptoms of suffocation appeared, and he died on the morning of the 28th, in a fit of tetanic spasm, notwithstanding the treatment adopted.

Now, such an occurrence as this is, I need scarcely say, most appalling. A patient suffering merely from a local affection, with constitution unaffected, has an issue inserted in the ordinary course of treatment, and in a few days gets, as the result of that issue (and unquestionably it is the result of the issue), a disease of which he speedily dies. Such an occurrence would indeed be as remarkable as it really is mysterious, were it not that similar ones are by no means infrequent. In fact, surgeons have learned to look upon tetanus as one of those affections which necessarily give rise to an appreciable per centage of deaths in patients suffering from injuries or operations.

With regard to the disease which destroyed the life of this patient, viz: tetanus, I shall say nothing concerning the symptoms, because they exhibited nothing peculiar; but I intend to pass in review a few points connected with its cause, its nature, and its treatment.

1. *Cause.*—Individuals may, doubtless, be seized with tetanus, although not having any breach of surface; but, in the vast majority of cases, the affection comes on as the result of wounds of some description, and these, very generally, wounds of a trivial character. Thus it does not so commonly follow compound fracture of the thigh or leg, as it does minor injuries of the extremities; nor is it so frequent after amputations, resection of joints, or the removal of large tumors, as it is after minor operations; so that it may be looked upon as most commonly resulting from minor surgical injuries and operations. On looking over a list of the cases which have been under my care in this hospital, I find that, in not one has tetanus come on as the result of the major operations, or more severe accidents, but such injuries as punctures, and compound fracture of the fingers or foot, lacerated wound over the wrist, or a burn on the trunk, are among the injuries giving rise to it. So far as operations are concerned, although it may certainly occur after the major operations, it has generally followed such operations as those for varicocele, fistula in ano, ligature of piles, etc., all of which are quite as liable, if not more so, to be followed by tetanus, as the severest operations in surgery.

With regard to the general causes of tetanus, it is no doubt predisposed to greatly by the season of the year, and by epidemic constitution. At those periods and seasons when there are great alterations of temperature—when hot days are succeeded by cold nights—tetanus becomes frequent. In hospital practice there may be no case for months, then several may occur in rapid succession. The week before this boy died, I saw, not a quarter of a mile from this hospital, another case which also ended fatally. The circumstances in which the patient is placed, exercise great influence; it may occur in the old as in the young, in the weakly as in the robust. So far as my experience goes, it is more frequent among young adults and elderly people than at the middle period of life; more frequent among the weakly than the robust. Indeed, when a person apparently in robust health is attacked, it will generally be found that, previously to the supervention of tetanus, he has been subjected to some depressing influence—has been out of health in some way, and has lost tone and vigor.

One of the most important causes of tetanus, especially in military surgery, and probably, a not unfrequent one in civil practice, is exposure to alterations of temperature and currents of cold air. Hennen states that this was the most frequent cause of tetanus among the wounded in the Peninsular War. Larrey observed the same in Napoleon's campaigns. After the battle of Bautzen, a large number of wounded were left upon the field, exposed to the cold night air. Next day a considerable proportion were found to be affected with tetanus. After the battle of Dresden, the same thing was observed; while after Moskowa, where the night was warm, although the number of wounded was immense, the proportion of tetanic cases was very small. In our Indian campaigns, at Chillianwallah, and at Ferozepore, the wounded, after severe exertion under a burning sun, were left exposed during an exceedingly cold night, and according to Dr. McLeod, in a very interesting work called "Notes of the Surgery of the Crimean War," which I can strongly recommend for your perusal, the result was a large number of cases of tetanus. M. Baudens, again, the chief surgeon to the French army in Algeria, noticed, that out of a small number of wounded placed in a corridor through which played a draught of cold air, a large proportion were seized with tetanus in a single night. All this points to the importance of our not allowing wounded or operated patients to be exposed to draughts of cold air.

The number of cases of tetanus in proportion to the number of wounded varies in civil and military practice, and in different climates, etc. Mr. Rutherford Alcock, who accompanied General Evans' expedition into Spain about twenty-five years ago, gives the proportion of tetanus to wounded as 1 to 79. Sir J. M'Grigor in the Peninsular war, found it to be 1 to 200; and in the Schleswig-Holstein campaign it was, according to

Stromeyer, 1 to 350. In the Crimea, so far as we can judge by official returns, the proportion of tetanic cases was very small. These discrepancies are no doubt due to the different conditions under which the soldiers were placed. Thus, in the Crimea, being engaged principally in siege operations, the wounded were not left exposed during the night, but were removed at once and put under cover; and in the Schleswig-Holstein war, each army being close to its base of operations, could take adequate care of its wounded, who therefore were not exposed to those conditions which military surgeons recognize as the most potent causes of tetanus.

As I have already stated, the proportionate number of deaths from tetanus varies widely in different climates. At Bombay, according to Mr. Poland (who, in a very able paper, has exhausted the statistics of tetanus), it is 2.5 per cent. of all deaths; in London, according to the Registrar-General's returns, 00.25 per cent. This preponderance in Bombay is no doubt owing to the heat of the climate; but it must be observed that the proportion is not nearly so great among the Europeans there as among the natives.

The situation of wounds: has this any influence in determining the occurrence of tetanus? It is a prevalent opinion, both among non-professional and professional people, that wounds of the hand, particularly those of the thumb, and, above all, those of the web between the thumb and index finger, are more prone to be followed by tetanus than wounds elsewhere. Whether this be true or not, admits, I think, of great question. That the hands are much more liable to injury, and are much more frequently wounded, than other parts of the body is evident, and the absolute number of cases following such injuries would therefore be expected to be greater; but whether the *relative* number is greater is questionable. On looking over my notes of eighteen cases of tetanus which have come under my observation, and of which I have kept a record, I find that in five of the eighteen the hand was the seat of injury—that is, a little more than one-fourth; but this, I should say, is about the proportion which injuries of the hand, including those of the most trivial character, bear to injuries of all other parts of the body.

2. *Nature.*—The exact nature of tetanus is an unsolve

question. Nothing appears more mysterious than an affection such as this, which often seizes an otherwise apparently healthy person suffering from some slight injury, with the more violent convulsive spasms terminating in death in three or four days, or even in less time than that. We have to inquire into the condition of the nervous system, on which such a disease as this is dependent. On examining the brain and spinal cord, we find nothing special to the affection—no lesion which would enable the most experienced pathologist to say that the person had died of tetanus. It is true, that we often find some congestion, or softening, as in this case, just above the cauda equina, or a large amount of serosity in the ventricles or subarachnoid space, which may be turbid or bloody; but all such appearances are common to other diseases beside tetanus, and none of them will enable us to assert the existence of tetanus during life. Look at the brain and spinal cord before us. They are to all appearance perfectly healthy, with the exception of some slight congestion, and a small softened patch in the cord, just above the cauda equina. They present no special appearance, no sign by which the acutest pathologist could, by any examination, anatomical or microscopical, say that they came from a tetanic patient. Finding no structural lesion post mortem, medical men have been in the habit of calling this, in common with other diseases of which the exact cause is alike unknown, a "functional disease." But the term "functional disease" is only used as a cloak to ignorance; there is no such thing as a functional disease, and the person who uses the expression merely means that he does not know the organic lesion on which the disorder depends. Every function is the result of the action of an organ; every derangement of a function is the result of the derangement of the corresponding organ; and no function can be deranged without previous or co-existing derangement of the organ whose action constitutes the function. As pathology advances, the class of "functional disorders" becomes less and less. We do not now hear of functional disorders of the heart, lungs, or joints, because the pathological anatomy of those parts being well understood, it is possible to refer their diseases to the real cause. As the physiology and pathology of the nervous system are not well ascertained, notwithstanding the labors of such men as Marshall Hall and Brown Sequard, many affections of that system are at present inexplicable, and "functional" nervous disorders are very common. No surgeon speaks of "functional" coma, because the particular cause (compression) of the coma is well known and easily recognized; but one still hears of "functional" amaurosis, and tetanus is commonly spoken of as a functional disease. Amaurosis, when I was a student, was looked upon almost solely as a "functional" disorder; but the introduction of the ophthalmoscope has shown that in most cases where functional disease was formerly said to exist, there is, in reality, some structural change in the nervous apparatus of the eyeball appreciable by the naked eye. So it will be with other affections as pathology advances, and disease hitherto vaguely and loosely spoken of as functional will be found to depend on organic changes as appreciable by the senses as are the changes in an amaurotic retina and choroid.

Yet there is in traumatic tetanus, I believe, always a certain condition of the nervous system to be met with, if carefully looked for, namely, an unhealthy state of the nervous branch, or twig, running from the wound. This twig will be found implicated in some way—congested, inflamed, infiltrated; its neurilemma thickened, softened, and discolored, often for a considerable distance from the wound. I have never failed to find this when it has been carefully looked for. In the present instance, a cutaneous branch was found lying bare and inflamed in the bottom of the issue-wound. In many other cases I have seen the same. Thus, in the case of a girl who had tetanus, consequent on a small punctured wound on the inner side of the thigh near the knee, a branch of the internal cutaneous nerve was found in this condition. I have seen injury to the internal plantar nerve, by treading on a rusty nail, followed by tetanus, and the nerve after death found irritated and inflamed. A dorsal cutaneous nerve was implicated in a case of tetanus following a slight burn on the back, and the external cutaneous branches of the musculo-spiral were affected as high as the bend of the elbow, in a patient who died from tetanus following injury to the thumb. A similar condition of these nerves was observed in a man with lacerated wound over the wrist. These and other similar cases which have fallen under my observation, clearly demonstrate, that although we may fail in discovering any special lesion in the central nervous system, yet, that in most, and—so far as my experience goes—in all cases in which the examination is carefully conducted, it will be found that a nervous twig connected with the wound is irritated and inflamed; and this seems to be the starting point for this so-called functional disease. An organic lesion, not central, but peripheral, still exists, as essential to the production of the affection.

3. *Treatment.*—With regard to the treatment, I need say very little, and that little is in no way satisfactory. The case we are now considering followed the usual course of such attacks, beginning with stiffness of the muscles supplied by the portio dura, violent general spasms coming on in the course of twenty-four hours, and death occurring between the fourth and fifth day. More than half the cases of tetanus die before, or on the fifth day from the commencement of the spasms. If the patient survive that time, the symptoms tend to become milder, the disease may wear itself out, and recovery follow. I have seen death occur in less than thirty hours, and as late as the twentieth day; so that the fact of the attack being very chronic is no proof of its innocency. Acuteness of attack, however, is a sure sign of great danger. So, also, the sooner the symptoms come on after the infliction of the injury, the greater is the danger, and the more speedy the fatal issue.

In considering the treatment of tetanus, we must divide it into that of the acute or active, and of the chronic or sub-acute form. In the treatment of *acute* tetanus, I believe that no remedy known exercises the slightest *curative* influence. To drug a person affected with active acute tetanus, is, in my opinion, utterly useless. I have never seen nor heard of a case cured by the routine treatment; the sooner we abandon such, I think, the better. Calomel and opium in large doses, the vegetable sedatives, belladonna, conium, henbane, opium, or camphor, largely administered, are all unavailing (when the disease is acute) in retarding, mitigating, suspending, or arresting its progress. If we are ever to cure acute tetanus, we must give up this line of treatment, which we have been taught by experience to be useless, and endeavor to discover some new principle to guide us in the management of this affection. Yet acute tetanus may be cured, though not, I believe, by medicine; and much may be done to mitigate suffering. The first thing to be done, is to divide the nerve leading from the wound, where it can be found and isolated. The wiser plan would be to divide the trunk of the nerve high up in the limb, so as to get beyond the sphere of the local irritation, which appears to be the chief organic lesion discoverable in these cases. Patients have been cured by this means. Mr. Murray (the surgeon who tied the abdominal aorta) relates the case of a midshipman, who received a wound in the foot from a rusty nail; tetanus came on; Mr. Murray divided the posterior tibial nerve, and the patient recovered. Such cases give hope of being able to save others, and this operation should therefore be done at once, where practicable. It is not, however, by any means invariably successful. Last session, I divided, without success, however, the branches of the external cutaneous for tetanus, following a wound of the back of the hand.

In the general management of the patient, we must remember that we have an exhausting disease to deal with; the patient sweats profusely during the intervals of the spasms, and will soon sink if not supported. All external causes of excitement should be removed from about the patient; he should be kept perfectly quiet, his bed surrounded with screens or muslin curtains. In addition to these means, the occasional inhalation of chloroform will alleviate, though it will not cure, acute tetanus.

In *sub-acute* and *chronic* tetanus, the case is different. If the patient survive the fifth day, and the affection assume a chronic or sub-acute character, we may entertain some hope of his recovery. He should be kept quiet—his strength supported. Terebinthinate enemata, calomel with opium, belladonna or conium, are the remedies to be employed. Many patients have got well under, and seem to be cured, by this plan of treatment. Cannabis indica, ether, and clhoroform, have also been recommended, but are not alone to be trusted to. At all events, calomel and opium, and, if you like, belladonna also, may be given with advantage. You may also feel disposed to try the effect of the sedative alkaloids. I am not aware of any cure having resulted from their use, but atropine, applied liberally, has been beneficial, by mitigating the pain which the patient suffers. Such alkaloids, or the corresponding vegetable extracts, may therefore be applied with benefit.

To sum up: it appears that the best prospect of a cure is to be found in the division of the nerve leading from the seat of injury, whenever this is practicable; in the employment of proper hygienic and dietetic means; in the removal of all sources of external excitement and irritation, local and constitutional; and in the administration of moderate doses of calomel and opium, with turpentine enemata. Such measures as these, I say, appear to be more rational, and to hold out a better chance for the patient, than the empirical administration of specific sedatives, which experience has repeatedly proved to be unavailing in curing the disease, and often even in mitigating its sufferings.—*Lancet.*

(In the treatment of tetanus, calomel, the other remedies, and even section of the nerve, as recommended by Mr. Erichsen, will prove, in a majority of cases, unavailing. The course that offers the best chance of success, is to stimulate the depurating organs and keep the patient constantly relaxed with large doses of tincture of gelseminum.—As'T. Ed.)

Dr. Horace Green and Catheterization of the Bronchi. By the Editor. (Read before the Medico-Chirurgical College, New York.)

The paper recently read before the College by Dr. Horace Green having now been published, is legitimately open to criticism. On hearing it read, I expressed my dissent in general terms to some of its teachings, and proposed, as soon as opportunity offered, to discuss its merits and demerits. That opportunity has now arrived, and I shall exhibit the grounds of my dissent in his presence, and in the midst of his friends, of whom I claim to be one, and none the less because I may differ from him on some of the points made in his late paper. Indeed, he himself complains, and with apparent justice, that the New York Academy of Medicine have allowed their own report on this subject to sleep on their table for five years unmolested, and contrasts this neglect with the extensive attention paid it by medical men abroad; so that he invites and challenges scrutiny on the subject of this paper by the profession everywhere.

The title of this paper is, "On the *Difficulties* and *Advantages* of Catheterism of the Air-Passages in Diseases of the Chest." And in a spirit of candor he first proposes "to *correct* in his former publications what later experience and more extended observations have shown to have been *erroneous conclusions*," and expresses his wish to "record and announce these *recognized errors*, and to point out some of the *difficulties* that attend this plan of treatment."

After such an exordium, he most strangely proceeds to reply to this question, viz:

1. "Can the operation of catheterism of the air-passages be performed with *certainty* and *facility?*"

This is all he ever claimed in any of his former papers, viz: "*certainty* and *facility*," which in terms ignore any "*difficulties*." What "difficulty" is there in doing that which can be done with "certainty and facility?" This question he nevertheless answers affirmatively, in a paper, the title of which admits that there are *difficulties*, the only point upon which the Committee of the Academy had definitely pronounced. Its "*possible practicability under favorable circumstances*" nobody has denied or doubted, and Dr. Green had no pretext to prove this by any authorities. All of us have seen it done, if any of our number have not repeatedly done it. But as to the "certainty and facility" of doing it, none of us can express our dissent in more explicit terms than does the author himself in another part of this identical paper, when he sets forth its *difficulties*, and even *dangers*, in terms which exhibit the opposite of "certainty," or "facility" either; and this not only in the hands of Bennett, Trousseau, and other authorities, but even in his own hands. I quote from page 3 of the printed copy:—

> "Notwithstanding this operation is being daily performed at the present time, yet it is not always accomplished with certainty and facility. Nature has so guarded the opening into the ærien passages that catheterism of the bronchi is an operation that will be found difficult often to accomplish. In many cases, I am confident, the tube passes over the glottic aperture, and enters the œsophagus, even when the operator feels quite

certain that it has been introduced into the larynx. In my own practice *I have found myself deceived, not unfrequently*, especially in the first years of my experience in this mode of treatment. At first I believed the instrument to have taken the right course, but afterward ascertained, in many instances, that it had *entered the œsophagus.*"

Dr. Green himself also admits that thirty-two attempts were made by himself and others before the Committee of the New York Academy of Medicine, and that they succeeded in only eleven cases, while they failed in twenty-one. Did this imply "certainty and facility," or prove the opposite of both, very great difficulty?

But I now cite from the 4th and 16th pages of the printed copy of Dr. Green's paper, to show that he admits numerous "difficulties and dangers," wholly inconsistent with either "certainty or facility:"

> "The arytenoid muscles are the especial *constrictors* of the glottis. These muscles (as Longet has demonstrated) receive filaments from the recurrent nerve. Covering the lips of the glottis is a narrow zone of exquisitely sensitive mucous membrane, which receives its nervous filaments from the internal branch of the superior laryngeal nerve. These two nerves, the one supplying the constrictors, and the other this strip of mucous membrane, communicate freely with each other, but they have no connection whatever with the epiglottis. The irritation of this body, therefore, will have no effect upon either the motive or sentient nerves peculiar to the larynx. This is important to remember, namely: that the epiglottis, in its normal state, is an organ nearly insensible; but when the least irritation of that sensitive portion of the mucous membrane which covers the supra-glottic space occurs, this irritation is quickly communicated to the constrictor muscles, through filaments of the recurrent and laryngeal nerves, and the aperture of the glottis is as quickly shut up. When it is desirable, therefore, to medicate the ærien passages in diseases of these parts, it is necessary, as all are aware, to educate the glottic aperture, by repeated cauterizations of this opening. For if, under ordinary circumstances, the attempt be made to pass the sound, or probang, into the larynx before the exquisitely normal sensitiveness of this point of membrane be partially subdued, it will probably prove abortive; or, if successful, and the instrument be made to pass the supra-glottic guard, a violent spasmodic action, not only of the constrictors, but of all the other muscles of the larynx, will occur, followed, often, by great irritation of the parts, and a suffocative cough; and if,

under these circumstances, the operator persist in finishing the operation, by injecting a solution of the nitrate of silver into the bronchi, the irritation and cough are both greatly increased, and in some instances inflammation of the bronchial and pulmonary tissue have been awakened, apparently by these combined disturbing causes." "I first prepare my patients by making applications, with the sponge-probang, and nitrate of silver solution, for a period of one or two weeks, to the opening of the glottis and the larynx, until the sensibility of the parts is greatly diminished. Then, having the tube slightly bent, I dip the instrument in cold water, (which serves to stiffen it for a moment, and obviates the necessity of using a wire), and with the patient's head thrown well back, and the tongue depressed, I place the bent extremity of the instrument on the laryngeal face of the epiglottis, and gliding it quickly through the rima glottidis, carry it down to, or below, the bifurcation, as the case may require. It is necessary that the patient continue to respire, and the instrument is most readily passed during the act of inspiration. The tube being introduced, the point of the syringe is inserted into its opening, and the solution injected. The latter part of the operation must be done as quickly as possible, or a spasm of the glottis is likely to occur. Indeed, if the natural sensibility of the aperture of the glottis is not well subdued by previous applications of the nitrate of silver solution, or if the tube, in its introduction, touches roughly the border or lips of the glottis, a spasm of the glottis is certain to follow, which will arrest the further progress of the operation."

Indeed, at the expense of consistency, yet with a candor which does him credit, he relates a number of cases in detail, showing that both difficulties and dangers of a formidable character, even jeoparding the life of the patient, have attended and hindered this catheterism of the air-passages, and even relates fatal cases in inferior animals (the cat and dog), which he ascribed to the strength of the injection employed; see p. 10–11. And it will be recollected that Dr. Carnochan related at the time that he tried it on two dogs, and killed them both.

"I have recently instituted some interesting experiments upon animals (the cat and dog), in order to ascertain how strong a solution of nitrate of silver can be borne, when injected into the trachea and bronchi. I experimented upon three different animals, but found the results the same, under similar circumstances, in both the cat and dog. But I will detain the College with the history of only one case.

"A young dog, eight months old, weight fifty pounds, was treated by bronchial injections. His jaws were opened by an assistant; a cord being placed around his tongue, it was readily drawn out of his mouth, when the epiglottis, and the opening of the glottis, were seen without any difficulty. I passed the tube quite readily into the larynx, and carried it down eight inches, in the trachea. Here it was allowed to remain several minutes, without producing the least disturbance, while the respired air passed freely through the tube. After a time I injected a small amount of a weak solution of the nitrate of silver through the tube into the lungs of the animal; but, as he did not seem to be at all affected by this, I soon after threw in half an ounce of a solution of the strength of fifteen grains to the ounce. After being released, he commenced playing about as usual, without showing a symptom of any disturbance whatever. The next day he appeared perfectly well, and was as playful as ever. At 5 o'clock P. M. on the following day, I again introduced the tube into the dog's larynx, and conveying it down, nearly the whole length of his trachea, but not below the tracheal bifurcation, I injected into the bronchi the ounce syringe full of a strong solution of the nitrate of silver, of the strength of thirty grains to the ounce of water. This amount, in proportion to the weight of the animal, would be equivalent to three ounces of the solution of this strength to an adult. The respiration of the animal was not impeded at the time, nor did any signs of suffocation follow immediately this operation of injecting so large an amount of fluid into the air-passages. The dog, for a time, ran about as usual. At 7 o'clock, two hours after the operation, I visited him at his kennel, and calling him out, found him with tail hanging down, eyes dull, and breathing with some difficulty, and uttering occasionally a short cough. On listening to his sides, moist, bronchial, and crepitant rales were heard throughout both lungs. He was allowed to lie down in his kennel. At 10 o'clock I went to see him again, when I found that all these symptoms had greatly increased; the dyspnœa was quite difficult, and the dog was disinclined to move about. He died during the night.

"I examined the lungs the next day; the bronchial mucous membrane was highly inflamed. Both lungs were inflamed, and gorged with blood; and bloody and frothy mucus blocked up the bronchial tubes. The animal died, therefore, of inflammation of the lungs and bronchi, superinduced by the large and strong injection of a solution of nitrate of silver into the bronchi.

"It is evident, then, that nitrate of silver may be used of that strength, and to that amount, in bronchial injections, as to prove fatal to animal life."

I now refer to the description given on page 5 of the symptoms in one of Dr. Green's own cases, and any pathologist can judge whether its repetition would have been safe, or justifiable:

"A spasm of the glottis immediately succeeded its introduction, and instead of withdrawing it at once, as should have been done, I proceeded to finish the operation, and injected a drachm of the solution (15 grains to the ounce) into the bronchi. By the time the operation was completed, the whole chest seemed thrown into a violent spasmodic action; a convulsive cough, with dyspnœa, followed, which continued during several hours, but was finally somewhat relieved by the use of chloroform, and the administration of anodynes. The cough and dyspnœa, however, with increased expectoration, and pleuritic pains, continued for several days; and, although the patient became in the course of a week quite comfortable again, under general treatment, yet she never entirely recovered the favorable state she was in before the occurrence of the spasm. As the patient and friends were greatly opposed to any further *topical* treatment, it was never afterward employed. The pulmonary symptoms increased, the disease progressed, as usual in such cases, and the patient died on the 10th of October, about two months after the employment of the tube."

Dr. Richards' case is found on pages 6 and 7, and is cited in corroboration:

"By the time the operation was finished, the muscles of the throat and chest were violently convulsed, and this was followed by a suffocative cough and profuse expectoration. This irritation, increased cough, and expectoration lasted during several days; but it finally subsided, and the patient ultimately regained a good degree of health."

But read Dr. Bennett's report on page 7, and what shall we say of "certainty and facility" here? Dr. Trousseau's fatal case is recorded in the same connection, pages 7 and 8, although he ingeniously explains it, and Dr. Green gives still another, and very plausible theory, but the patient was dead.

"He writes: 'A gentleman, in the last stages of phthisis, with cavities in both lungs, and tubercles very generally distributed among them, after long treatment with the probang, allowed me to inject the bronchi. I did so, and he was immediately seized with the most violent dyspnœa. I thought he would have died in my study. It continued several days, and then gradually declined. After five weeks' confinement to bed, he was restored to the same condition he was in formerly. This was six months ago. My opinion is, that he made a too violent effort to hold his breath and retain the catheter, and either ruptured an emphysematous portion of the lung, or caused a small abscess to break, as the operation was followed by abundant purulent expectoration.' "

" 'Once this practice,' continues M. Trousseau, 'in my hands, caused the immediate death of a child. The case was as follows: I had operated upon a child two and a half years old; he breathed very well. I dropped into the trachea ten or fifteen drops of a solution of nitrate of silver; a coagulation of thickened mucus, which was in the principal bronchi, immediately followed, and the child died, strangled, in less than a minute.' 'An accident of this kind,' he adds, 'can never happen if a sponge moderately wet with the caustic solution be used; and with the instrument which you use, a model of which you sent to me, I can not see how an accident can occur to the lungs.' "

Thus far it will be obvious that my dissent from the teachings of this paper have been restricted to the simple proofs furnished in the paper itself, that the "difficulties" of this operation are underrated, and even ignored by the claim of "certainty and facility," which latter claim is here denied, and this on the authority of Dr. Green's own showing.

(*To be continued.*)

PART FOURTH.

EDITORIAL.

ON THE IDENTITY OF THE IMMEDIATE CAUSE OF INCREASED ARTERIAL ACTION IN IDIOPATHIC AND INFLAMMATORY FEVERS WITH REFERENCE TO IDENTITY OF TREATMENT.

Assuming as axiomatic that the pulsations of the heart depend on the operation of a single instrumentality, we lay down the proposition that increased action of that organ, whether in inflammatory or idiopathic fevers, is produced by one and the same cause; and hence the treatment in both cases should be identical.

To establish the above proposition, it will be necessary to inquire into: 1. The cause of the heart's pulsations. 2. The cause of its increased activity in inflammatory fevers. 3. The cause of its increased action in idiopathic fevers. Then, by comparing the causes of both classes of excitement, it will be seen that they are identical, and the treatment therefore should be similar.

1. What causes the heart to pulsate?

This point, like many others in physiology, is not yet satisfactorily determined. Some maintain that the sympathetic ganglia with which the heart is abundantly supplied, are the source of motive power. Others, with Haller, attribute it to an inherent irritability belonging to the muscular tissue of the heart itself. The opinions of Dr. Fletcher, and the experiments of Willis, Home, Clift and Brachet support the view, that the actions of the heart are not dependent on the cerebro-spinal system—though influenced by it—but that they may be referred to the influence which the sympathetic ganglia exert upon the muscular tissue of the organ. This view is sustained by the following consideration: 1. The motions of the heart, like all other actions over which the sympathetic presides, never give the sense of weariness. 2. The heart will continue to contract after the destruction of the cerebro-spinal axis, and even after it has been entirely removed from the body. 3. After it is taken from the chest, it will contract more vigorously on the application of an electric current to one of its sympathetic ganglia, as noticed by Humboldt. 4. Lallemand, Sweatman and Lawrence have observed the contractions to continue for some time in monsters born without a brain or spinal axis. Upon these data we may safely base the conclusion that the immediate instrument by which the heart's action is continued, is a nervous influence derived from the sympathetic ganglia, to be found located in the organ itself, and constituting a part of the cardiac plexus.

Such being the agent by which the heart's pulsations are maintained, increased action of the organ may result from two sets of causes—centric and eccentric. The first acts from within, the second from without.

The centric causes may have their effect through the cerebro-spinal or circulatory systems. It is well known that powerful mental emotions—grief, terror, anger, etc.—very speedily disturb the rhythmical action of the heart. The impression is transmitted through the spinal cord and inter-spino-sympathetic connections to the cardiacal ganglia, and thus deranges the normal action of those generators of heart-nerve force.

Again, as the perfect action of nervous tissue depends upon the integrity of the blood, any causes which retard the depurating processes, or favor the accumulation of effete material in the circulating medium, will so change the character of that fluid as to render it a morbid excitant of the nervous centers. This condition is seen in the mental disturbance arising from the imperfect elimination of urea by the kidneys, the *muscæ volitantes* of typhoid fevers, and in many other pathological states too numerous to be mentioned. Upon the same principle, the organic centers may be morbidly excited, and thus a biliary, gastric or nephritic derangement, by contributing to the accumulation of morbific material in the circulating mass, may indirectly establish perturbations in the heart's action. It is important to bear this principle in mind, because it lies at the foundation of an explanation of increased arterial excitement in fevers.

The eccentric causes, or such as act from without, make their impression first upon the filaments of the sympathetic nerves, distributed with the arterial ramifications to surfaces exposed to the action of external agents, and the impression, so made, is conveyed by direct nervous connections to the central ganglia, and is thence propagated to the heart. Thus, a blow or stimulant, if sufficiently strong, upon the exterior, certain chemical or acrid substances applied to the mucous membranes of the respiratory or digestive tracts, will produce a nervous disturbance, which, being directly transmitted to the cardiacal ganglia, there establishes an excitement that is immediately responded to by increased action of the heart.

Having thus established, we think satisfactorily, that a nervous force generated in the sympathetic ganglia is the immediate agency by which the heart's pulsations are continued, and having shown how causes, acting from within and without, may increase rhythmical action of that organ, we will approach the next division of our subject, and inquire:—

2. Into the causes of increased arterial action in high grades of inflammation.

To a proper elucidation of our views, it will be necessary to go somewhat into the nature and pathology of inflammation. This subject has been so hacked and mangled by writers of every grade, and such diversity of opinion has always, and still prevails in regard to its nature, that we undertake our task with reluctance, and with the consciousness that our own notions will conflict with those heretofore promulgated by some of our compeers and associates. The fact, however, that every man is alone responsible for his individual opinions, and has a right to express them on all medical topics, emboldens us to crave the favor of our readers while we attempt, as concisely as is consistent with a clear enunciation of our position, to lay before them our views upon the difficult and imperfectly understood subject in hand.

According to Andral, the word "inflammation," introduced in the infancy of science, though purely metaphorical, was intended to represent a morbid condition of parts, which seemed to be undergoing a process of *burning*. The term was applied to picture a group of phenomena, inseparable from which were "heat, pain, redness, and swelling." The same notion still prevails to a certain extent, and only serves to envelop the subject in a mist, which it is difficult for eyes, surmounted with the green goggles of educational prejudice to penetrate. The epithet is a misnomer; and we hope the reader will divest himself of all preconceived notions relative to the concomitant and indispensable symptoms usually described as characterizing it, and school himself into that liberal frame of mind that will permit him, if facts and arguments justify it, to conceive of inflammation—a necessity, yet a disease; a symptom of vitality, yet, under certain circumstances, destructive to it—as capable of existing without the presence of those glaring symptoms—heat, pain, redness, and swelling. We say the name is a misnomer. We say so, because it leads to error and confusion. As applied, it means nothing, it explains nothing—it only gives a confused idea of a set of phenomena, without reference to nature or cause. As the term can not now be discarded, we think it should be used only in the sense to which it has been restricted by Virchow, and which we shall endeavor to show is its proper significance, viz: as the vital result of a stimulant—*a symptom of vitality.*

In reviewing the history of medicine, we find that there is no subject which has been more fruitful of discussions and bitter controversy than that of inflammation. Let the reader examine all that has been written upon it, from the elaborate essays of the ancient fathers, who mystified every subject with an *archæus* or vital principle, to the polemic treatises of Dr. Bennett and the late Dr. Alison, and the conviction will inevitably be forced upon him, that, notwithstanding the multitudinous host of words which have been expended on its explanation, no theory has yet been elicited that can be relied upon as absolutely correct. It appears that before the days of Van Helmont, inflammation was usually attributed to a vitiated state of the fluids, and most men were satisfied with the explanation; but this scientific adventurer, having obtained a smattering knowledge of the "gaseous fluids," made it the basis of a new theory in which inflammatory action was ascribed to an *irritation*—arising from a disturbance of the *archæus*—which attracted the blood in greater quantity to the capillaries. The doors of discussion once open, about the close of the seventeenth century numerous theories were sprung, and contended for by distinguished authors. Des Cartes and his followers attributed it to a *fermentation* excited by the ethereal fluid to be found in the blood. Le Mort, Schneller, and others imputed inflammation to an irritation caused by the ethereal particles of the fluids. Pitcairn, Sanctorinus, Bellini and Donzillini advocated the purely mechanical theory. They assumed the existence of three orders of capillaries, and different sized globules. The obstruction that would arise by the passage of larger corpuscles into the small capillaries, they called an *error loci*, and assigned it as a cause of inflammation. Bœrhaave supposed the blood became more viscid, occasioning a sluggish motion, and eventually a complete stoppage, which was inflammation. Hoffman thought that inflammation was owing to spasm of the capillaries. Vacca Berlinghieri advocated the doctrine of the *relaxation* of the coats of the capillaries, whereby the blood becomes nearly stagnant. The credit of having originated the theory of *increased action* of the vessels, is divided between Gorter, Gaubius, and Glisson. According to them, inflammation depended on an irritation which increased the vital action of the vessels. J. Hunter adopted similar views.

This hasty notice of the more ancient opinions has been made to show what a variety of theories have, at different times, been entertained. Authors of a more modern date are scarcely less divided in their views. Some contend that inflammation is a healthy, others a diseased action; some maintain the purely chemical doctrine—that it is a too rapid oxidation or burning; while others, with equal force of argument, insist that it is dependent entirely upon nervous disturbance; some argue that it is a symptom of vitality, while others, with Virchow, say that little is known about it. We are disposed to think there is much truth in the last remark, yet there is a theory which will harmoniously explain all the phenomena, and as ample experience proves it to lay at the foundation of a sound and successful practice, we have adopted it, and will now give it for the benefit of others.

According to the best pathologists, the phenomena to which the term inflammation is applied, and which terminate with *exudation*, usually appear in the following order: 1. The capillary vessels are narrowed, and the blood flows through them with greater rapidity. 2. The same vessels become enlarged, and the current of blood is slower, although even. 3. The flow of the blood becomes irregular. 4. All motion of the blood ceases, and the vessel appears fully distended. 5, and lastly, The liquor sanguinis is exuded through the walls of the vessels; and sometimes there is extravasation of blood corpuscles, owing to rupture of the capillaries. (*Bennett.*) Such are the *facts* deduced from careful microscopic observations. When a number of such facts are presented, we are at liberty to make them the basis of a theory, whence some general principle may be derived, that will be of advantage in practice.

The explanation of the foregoing phenomena or theory which we propose, is predicated on the *partial* assumption, that the *capillaries of all portions of the body are supplied by nerves from the sympathetic system*, and that by them, circulation, and, consequently, nutrition, are controlled. We are conscious that this is the assailable point in our argument, since such a distribution has never yet been demonstrated, and its existence lays at the foundation of our theory, yet the position can almost be demonstrated by reason, and is sustained by no less authority than Copland. He says (*Dic. Prac. Med.*, p. 456: "The nerves which supply the arteries and capillaries are chiefly ganglial, or derived from the organic or sympathetic system; but filaments from adjacent parts of the cerebro-spinal nervous system communicate with them. Ganglial nerves have been traced around the arteries as far as the interior of the cranium and the principal arteries of the extremities, by Weber and the author, in 1816 and 1817, and more recently by Ribes and others; and *there can be no doubt that they extend even to the capillaries*, endowing these vessels with influence, and with the properties evinced by them in health and disease."

The italics are our own, and we emphasize the sentence to call particular attention to the opinion of this distinguished author, given after a series of careful dissections and observations, undertaken with special reference to determine the true nature of inflammation. The distribution for which we are contending has not been demonstrated, because of the difficulty of making such fine dissections, and the impossibility, when so minute, of separating, even with microscopic aid, organic from other nervous filaments. But that the capillaries are supplied by ganglionic fibers, is rendered almost certain by the following universally conceded considerations:—1. The ramifications of the cerebro-spinal system may become much irritated, as in neuralgia and spasmodic affections, without inducing inflammation. 2. In injuries of the spinal column resulting in paraplegia, the lower extremities, though entirely deprived of the influence of the cerebro-spinal nerves, as evidenced by total loss of sensibility and motion, are still not more liable or free from inflammation than under ordinary circumstances. 3. Impressions, acting through the cerebro-spinal system, do not *immediately* create local variations of circulation, except in the face, as observed in blushing. The facial nervous distribution differs from that of other localities in being more abundantly supplied from both systems, from the fact that the face is the mirror of the mind, and always correctly reflects mental emotions, except when educated to practice deception. Even here the circulation is doubtless controlled by the sympathetic nerves, and the reason that we find so many centers located within the cranium and about the neck, is to bring the ganglionic and sympathetic systems into immediate relation, so that the emotions of the mind may institute, through the former, rapid changes in the circulation, and through the latter, speedy contractions of the *expressive* muscles. 4. Inflammation often occurs in the substance of glandular organs, the arterial ramifications of which are supplied by organic nerves only. In such cases, no pain is experienced—pain arises only when the inflammation extends to the fibrous sheaths, or when the latter are made *tense* by infiltration and consequent enlargement of the contained substance, whereby pressure is made upon the cerebro-spinal nerves. 5. Local inflammations speedily derange the digestive and glandular organs, whose functional activity is entirely under the control of the sympathetic system, while the brain and spinal cord remain intact. Disturbing influences must, therefore, pass *directly* from the point of injury to the ganglionic centers, and not by way of the spinal column, which can only be accomplished by supposing the sympathetic fibers to extend on to the capillaries. 6, and lastly, The recent experiments of Bernard establish the fact that if a branch of the great sympathetic be divided, a notable and important change immediately follows in the parts supplied by it. Congestion of the capillaries and elevation of the temperature soon ensue. Physico-chemical alterations also occur in the blood, which becomes more fluid and coagulates immediately upon its withdrawal. The venous blood retains the hue of arterial. Thus it is seen that simple section of a ganglionic nerve establishes, in parts to which it is distributed, two of the phenomena of inflammation—heat and redness; and also disturbs the process of nutrition, as manifested by the changes set up in the blood. Hence the inference is irresistible, that the capillaries are supplied by filaments from the sympathetic, and consequently the circulation and nutrition of parts are controlled by the ganglionic system.

We have been particular in proving the justness of our last conclusion. because, once established, the local phenomena and constitutional disturbances of inflammation are easily and rationally explained as follows:—

The capillary vessels are narrowed, and the blood flows through them more rapidly, because the blow or irritant acts as a local excitant to the nerves, producing spasm of the coats of the capillaries, and as nutrition is not yet disturbed, and the same quantity of blood is driven onward through narrowed channels, its flow must necessarily be more rapid. The narrowing of the capillaries, it must be observed, is often of brief duration, and when the stimulant or blow is very powerful, it is scarcely perceptible, the vitality of the nerves being instantly overcome, and relaxation at once supervening. It is a well established fact that the opposite condition, depression or relaxation, always follows a nervous excitement that results in spasm. Upon this principle the walls of the capillaries lose their proper tonicity, become large and flabby, and the fluids circulate more slowly through them, as a necessity from their altered physical condition. After a time the blood is seen to oscillate and become irregular in motion. This is owing to the loss of that selective and attractive property manifested by healthy tissues for particles contained in the circulating medium. The normal motion of blood through the capillaries is mainly dependent on the attraction which worn-out particles have for oxygen, and forming structures for nutrient materials. When, therefore, the processes of nutrition and waste are disturbed by violence to the organic nerves—as proved by Bernard's experiments—this steady attractive force is lost, and the blood wanders from point to point, drawn here and there by small portions of tissue which have escaped the general disturbance, and in which the natural changes are still feebly going on. At length, when the nutrient processes are so far destroyed that no attraction is offered for the blood, the latter fluid gradually becomes stagnant, the capillaries remain full, and exudation of liquor sanguinis takes place. Thus all the phenomena of inflammation are easily explained. The manifestation of heat, pain, redness, and swelling is accounted for as follows:—Redness depends on congestion of blood in the capillaries; swelling arises from the exudation of liquor sanguinis; pain is occasioned by local irritation of sensitive nerves, and pressure consequent upon extravasation of serum:

and heat results from the cessation of the functional activity of the skin, whereby perspiration is checked, and the one thousand degrees of heat retained, which is normally absorbed in the vaporization of transpired fluids from the surface.

From what has been said relative to the nature of inflammation, and the immediate instrumentality of the sympathetic system in manifesting its phenomena, it will be readily seen that when once established locally, *it may effect increased action of the heart, by disturbing the nervous influence generated in the cardiacal ganglia*, in two ways:—1. The irritation, when sufficiently great, is transmitted by direct nervous communication through the sympathetic filaments, from the seat of injury to the ganglia of the heart, the functional activity of the digestive and glandular organs being, in the same manner, synchronously affected. 2. A derangement of the digestive and glandular organs may result primarily, and so alter the constitution of the blood as to render it a morbid excitant of the heart's ganglia. It is well known that local inflammation is soon followed by functional disturbance of the stomach, liver, kidneys, etc., which are controlled by the sympathetic system, while the brain and spinal cord are never primarily affected. This can only be explained by supposing the ganglionic system to be the prime instrument in developing the local phenomena, as well as constitutional derangement, for it would be strange, indeed, that impressions should first be carried to the brain and cord without affecting them, and at length become centered upon the sympathetic ganglia. The theory which we have presented not only explains this, but beautifully harmonizes all the facts and phenomena of the subject, and we give it for what it is worth.

The subject will be continued in our next number, when the pathology of fever will be touched upon. That the foregoing views may not be placed to the credit of the editor, who teaches a different doctrine, and might not thank us for making him father our theory, it is necessary for us to subscribe ourself as individually responsible for the above.

ASSOCIATE EDITOR.

ADVANTAGES OF THE MICROSCOPE IN DIAGNOSIS.

Dr. Bennett says:—"A knowledge of the ultimate structure of the human body, in its healthy and diseased conditions, is now so advanced as to necessitate the introduction of the microscope among the ordinary instruments of the medical practitioner." The same author relates a number of cases, in which the microscope alone enabled him to arrive at a correct diagnosis. Among them we find that of a woman, who complained of bronchitis, and was spitting blood. An examination of the sputum discovered the red corpuscles to be those of a bird. She acknowledged that she had mixed bird's blood with the spittle. A gentleman had for a number of years in vain sought relief from physicians and watering places. On examining the urine microscopically, spermatozoa were distinguished. He was treated for spermatorrhea, and recovered. It is unnecessary to multiply examples. There are certain diseased conditions which it is impossible to determine by the unassisted senses. Good microscopes are now so cheap that every practitioner should possess one. A few days since, Mr. Henry Ware, at No. 7 Fourth street, showed us most excellent instruments which could be had for the nominal price of from twelve to twenty dollars. Such a sum amounts to nothing in comparison with the advantage as well as pleasure to be derived from their use. With one of Mr. Ware's instruments and "King's Microscopic Companion," the practitioner will find himself much better qualified to discriminate disease.

A GOOD SUBJECT.

We have received a letter from Dr. B. M. Roberts, of Miss., in which he speaks of Epilepsy, the very little that is known about it, and the great lack of success attending its treatment. He proposes that the subject be discussed through this Journal, and that every physician give the result of his *own* experience, hoping in this way to obtain something valuable for the benefit of all. In reference to the plan, he says:—"I know of no better medium than your valuable Journal, whose pages have disseminated many of the most important truths that have been discovered, and have given the most successful treatment to be followed in a variety of diseases." He proposes the following questions:—1. Of what is epilepsy a disease? Will it exhaust itself, or be outgrown? 3. What is the best treatment for it?

We hope the subject will be taken up with zeal, and that all will feel it obligatory to give what they have found to be good. The disease is common, distressing, and of difficult management, and philanthropy should prompt every medical man to divulge any course of treatment which he may have found successful.

COLLEGE FEES—HIGH AND LOW.

Until 1852, the college fees in the Eclectic Medical Institute of Cincinnati, were as follows:—

Tickets for a single session, $60; matriculation fee, $5; graduation fee, $15. Tickets for a full course until graduation, $100, paid in advance.

From 1845, the time of chartering and formally opening the College, until the close of the spring session of 1852, the number of matriculants under the above arrangement of fees, was 1266; number of graduates, 316.

In 1852–3, the school was made free, only charging $15 for tuition and matriculation, and $20 for graduation. This year the matriculants were 308, and 70 graduates.

In 1853–4, the college fees, including clinic fee, were raised to $25. This year there were 292 matriculants, and 126 graduates.

In 1854–5, fees the same; the number of matriculants was 279, with 81 graduates.

In 1855–6, fees the same; the number of matriculants was 245, graduates 58.

In 1856–7, the first year after the difficulty in and division of the school, the fees were increased to $30, and the graduation fee to $25. The number of matriculants this year was 173, graduates 57.

In 1857–8, the number of matriculants was 154, graduates 70.

In 1858–9, the number of matriculants was 138, graduates 57.

In 1859–60, after the union of the two schools, the number of matriculants was 216, graduates 87.

Total number of students to the close of the session of 1859–60, was 3,071, number of graduates 922.

In seven years, while the Institute was in its infancy, and scarcely known to the medical profession, the number of students was 1266, and the number of graduates 316, with the fees as before stated; while, in the last eight years, with the fees varying from $15 to $40, the number of matriculants has been 1,805, with 606 graduates.

This statement shows conclusively that low fees in a medical college are a disadvantage to the institution, and the whole system of free medical education a failure.

If, under the original system adopted by the Eclectic Medical Institute, there had been one half the exertion made to obtain a large class, that has been made under the low-fee system, we doubt not but that double the number of students could have been obtained.

Now the Board of Trustees of the Eclectic Medical Institute has raised the fees to $85 per session; the graduation fee remains the same, $25; and from every indication, we are well assured that the class this winter will be very large.

We have no fears but that this move on the part of the College will meet with a hearty indorsement by the Eclectic Medical profession. If any object, we can say that, as the Faculty have devoted their time and labor for the benefit of the students and graduates of the College, for the last eight years, almost for nothing, after deducting the expenses of the College, it is but reasonable that they should be remunerated, and that others may now feel willing to aid the cause by paying more for that education which some, in the past, have acquired so cheaply.

Low fees also open the way into the profession, for many persons who will never, under any circumstances, benefit themselves or the profession; while every man who wishes to obtain the benefit to be derived from the labors of the Faculty will be willing to pay for it at the same rates as in other medical colleges of acknowledged repute.

ERRATA.

In the July No. of this Journal, we stated that the whole number of matriculants of the Eclectic Medical Institute to the present time was 3,106, and graduates 944. By a more careful examination of the records, we discover the whole number of matriculants to be only 3,071, and graduates 922.

NEW CHAIRS.

We notice in one of our western exchanges, that the Cincinnati College of Medicine and Surgery has established a chair heretofore unknown to Medical Colleges, that is, an *arm chair.* Speaking of the lecture rooms, the circular says:—"They are furnished with comfortable arm chairs, which are regarded as a decided improvement," etc. To speak our mind candidly, this speaks a little of clap-trapy, and might well be placed in the list with "barkers," "drummers," "anatomy by gas light," etc., etc. J. S. W.

We clip the above from the July number of the Savannah *Journal of Medicine*, of which J. S. W. is one of the editors; his associates, *two* in number, are *Professors* in the *Savannah Medical College*, an announcement of which we find in the same number. We have just finished a dissection, "by gas light, of this announcement, and find that *every* paragraph *leans terribly* in the direction of "clap-tray"-e-ry, for instance, "the Faculty have expended over *forty thousand dollars*" in the building and for *apparatus to demonstrate the various branches.*" This same announcement tells us, in speaking of the Faculty, that "their object was to create a school of medicine which should elevate the high standard of medical education." Have they succeeded? Let their requirements for graduation answer; they are three in number: 1st. "Good moral character. 2d. *Two Full Courses* of Medical Lectures. 3d. A Thesis written by himself." This is all, *positively all!!*—J. S. W. is smart—very.—*Cin. Med. and Surg. News.*

We judge from the above tart reply to J. S. W.'s sally of wit on the "new chair," that our cotemporary's "comfortable arm chairs" are not so easy as he would wish to represent them, but that they have already made a sore place on him *somewhere.* We advise him to have them *cushioned.* We think, however, it is really too bad in J. S. W. to make fun of such a "decided improvement" on the straight-backed, hard-seated, unyielding, grave-looking benches with which our colleges are usually furnished, and which stand like so many altars, ready to receive the sacrifice of a student's tender mercies to the god Apollo. Before J. S. W. indulges in any more of his satirical humor, he should remember that this is an age of *progression.* Antiquated, self-sacrificing, stoical notions are done away. The people now are beginning to relish comforts, and so do medical students—all are getting quite *dainty;* the former want *nice* medicines, the latter wish to enter the temple of Æsculapius by an easy way—seated in arm chairs if possible. Our cotemporary is wide awake to his own interests. He sees the advantage of such inducements, and has trumpetted it through the land. Long ago, *we* observed the benefit that would result from treating our students well, and making them comfortable, and for many years have had our lecture rooms supplied with the *arm chair*, although we have never made a *blow* about them to *draw.* We congratulate our friend upon the improvement, but if he really wishes to make the *chair* an inducement, he had better go a step further, and furnish his halls with comfortably cushioned rocking chairs and the *daily* papers.

OBITUARY.

DIED—In East Montpelier, Aug. 6th, ORANGE S. TEMPLETON, M. D., aged 23 years, 9 months and 11 days.

He graduated at the Eclectic Medical Institute, Cincinnati, Ohio, May 13, 1858. September, 1858, he settled in Danville, Vt., where he continued his professional labors until March, 1860, when he found himself compelled to exchange the labors of the physician for the sufferings of the patient. On the 23d of April he was carried from D. to the home of his childhood, where he gradually sunk under the power of the flattering, but yet fatal, disease, consumption, until "mortality was swallowed up of life." All that medical skill could do for him, was done. He was a young man of fine mental culture, and sound moral principles—an honor to the medical profession. He will long live in the fond recollections of many minds—in the warm affections of many hearts.

East Montpelier, Aug. 10th. D. FIELD.

We are pained to read the above intelligence, which we extract from the *Messenger*, of East Montpelier. Dr. Templeton graduated with high honors. He was beloved by the Faculty and his fellow students. In his death, the cause has lost a strong and true friend.

BOOK AND JOURNAL NOTICES.

DENTAL ANOMALIES, AND THEIR INFLUENCE UPON THE PRODUCTION OF DISEASES OF THE MAXILLARY BONES. By AM. FORGET, M. D., C. L. D. Translated from the French. Philadelphia: Jones & White. 1860. (Sent free of postage on the receipt of forty cents in postage stamps.)

The above was received some time since, but by accident was misplaced. It is a neat pamphlet, illustrated with beautiful engravings. It describes the various diseases of the maxillary bones, resulting from anomalous growth of the teeth. It is well worth forty cents.

LINDSAY & BLAKESTONE'S CATALOGUE.

These enterprizing publishers have sent us a catalogue of their Medical works, already out, and now in press. Among the latter we find the American Medical Biography, containing memoirs of the lives of distinguished American physicians. Edited by S. D. GROSS, M. D. The book promises to be interesting, and the publishers announce that the edition will be a limited one. Those, therefore, who wish the work are invited to send in their names, with the subscription price, $3.

EDITORIAL ABSTRACTS AND CLIPPINGS.

Treatment of Excessive Perspiration of the Feet.—(By M. Gaffard).—It is well known that excessive perspiration of the feet may be a very troublesome complaint. It not unfrequently produces excoriation between the toes, giving rise to an exudation of a disgustingly fetid odor; and it sometimes occasions ulcerations, which render locomotion very painful, or altogether impossible, forcing the persons affected to interrupt their business occupations. M. Gaffard, of Aurillac, recommends the following means, which he says he has employed in such cases with complete effect. The treatment consists in pouring between the toes a few drops of a liquid, composed of one gramme (fifteen grains) of red oxide of lead, and twenty-nine grammes (about an ounce) of the solution of sub-acetate of lead (of the French Pharmacopœia); the sesquioxide of lead is pounded in a mortar of porcelain till it is finely divided; the sub-acetate is added gradually, and the whole is put in a bottle, which is shaken each time it is used. This application made every eight days is sufficient, in most cases, according to M. Gaffard, to cure the affection, and prevent its return. The liquid, without completely stopping the perspiration, moderates its amount, and regularizes the action of the morbid surfaces. The perspiration becomes inodorous, the skin regains its original thickness at the excoriated parts without losing its pliancy, and the parts return to the natural condition of cleanliness and health.—*Rep. de Pharmacie and Edinb. Med. Jour.*

Atropia.—Dr. Pattee, of Massachusetts, advises this substance in "incontinence of urine." The following is his prescription:—

℞.—Atropia, gr. i.
Aqua distil., ℥ v.
Acetic acid, gtt. vi.

M.—Dose, one drachm three times daily. For children, the dose must be properly graduated.

Influence of Slow Lead-Poisoning on the Product of Conception.—M. C. Paul, resident physician to a Paris hospital, has collected 81 cases, showing the baneful influence of lead. His attention was attracted to the subject by the case of a woman who had given birth to three healthy children before she took to the occupation of printing type cleaning, and who out of ten subsequent gestations had had eight miscarriages. One child, which was born at full time, died at five months. The 81 cases refer mostly to women, only a few relating to men. From these cases, M. Paul thinks himself justified in supposing that lead-poisoning has not only the already well-known effects, but that it also causes the death of the fœtus, or the premature decease of the child, whether either the father or mother has been exposed to lead-poisoning. Out of the 123 gestations included in the 81 cases, 64 abortions, 4 premature labors, and 5 still-births were noted. It was, moreover, observed that 20 children born at full time died within their first year, 8 within their second, 7 within their third, and one only at a later period. 14 children are now alive, 10 of whom are above three years old. Metrorrhagia occurred in 15 cases, the loss of blood depending, very probably, on abortions.—*Gazette des Hospitaux.*

Mortality in the Russian Capitals.—At St. Petersburg, the number of births in 1858 amounted to 17,658 (9,147 boys, and 8,511 girls), while the deaths were 19,077. This fact, which occurs every year, demonstrates that, as the deaths exceed the births, the population of that city is only kept up by immigration. The number of illegitimate births increases, while marriages are diminishing. At Moscow, the number of births was 11,267 (5,822 boys, and 4,445 girls), and that of deaths, 11,703.

Dissecting Wounds.—M. Ch. Phillips, a surgeon well known in Paris by very successful labors in urinary pathology and practice, has been in a very precarious state from a dissecting wound, but is now recovering.

Iodide of Propylamine. By BENJAMIN J. CREW.—While the base Propylamine and its chloride are being investigated medicinally in this country, in order to verify or disprove the accounts received from Europe in relation to their asserted remedial powers in the cure of rheumatism, it occurred to the writer that a combination of this new remedy with iodine, in the form of an *Iodide of Propylamine* might possess some valuable medicinal properties in the same disease in which iodine either simply or in some of its combinations has been long employed, especially in chronic cases attended with nodular swelling. Propylamine combines readily with the aid of a gentle heat with iodine, and forms a colorless solution, in which the characteristic odor of each of these substances can be perceived. It may be prepared by adding iodine to a convenient quantity of Propylamine in a glass flask over a sand bath as long as the iodine is taken up; a deep red solution is first formed, which, as the combination is effected, becomes gradually colorless; in case of an excess of iodine, a small addition of Propylamine will speedily take it up. Its odor, as before observed, is a combination; in taste it is saline, resembling closely iodine of potassium, and behaves with reagents like this salt, giving the usual characteristic precipitates with acetate of lead, nitrate of silver, etc. It is decomposed by acids, liberating free iodine, which colors the solution red; with concentrated oil of vitriol the violet vapors of iodine are evolved and crystallize on the sides of the test tube. It is alkaline to test paper, but upon exposure, it changes and gives an acid reaction. I have not been able to procure the crystals in any appreciable quantity, as upon concentration the Propylamine is volatilized, and the solution becomes red from free iodine.

Not having seen any account of this preparation, it may be proper to suggest a formula for its employment, should it be deemed worthy of examination and trial; and being in a liquid form, a formula similar to one published some time since in this journal for the use of Propylamine, is proposed:—

℞.—Iodide of Propylamine,	25 drops.
Peppermint Water,	6 f. oz.
Sugar,	2 dr.

Dose.—A tablespoonful every two hours.

In this form the patient would receive the 1.16 gr. of Iodine at a dose.

Philadelphia, 7th month, 1860.

Case of Needle Swallowing.—A young woman accidentally swallowed, during an inspiration, a sewing needle, which she held between her lips. This occurred Sept. 14th. On December 28th, she drew attention to a small, but very painful swelling at the anterior part of the left side of the thorax. In this the needle could be plainly felt. It lay between the sixth and seventh ribs, at a short distance from the lower end of the ensiform process of the sternum. It was extracted by means of an incision from among some strong adhesions by which it was surrounded. For two or three weeks the girl had suffered from a dyspnœa that could not be accounted for; but as this ceased as soon as the needle could be felt under the integuments, Dr. Siegmund, who reports the case, believes that it was produced by the passage of the needle through the diaphragm.—*Virchow Arch.*—*Va. Med. Jour.*

A Remarkable Case.—Dr. King, of Monongahela City, Pa., reports a remarkable case of ascites, in the Medical and Surgical Reporter, in the person of a Mrs. Adams, aged forty-five years, on whom, during the last four years, he has performed the operation of paracentisis abdominis *forty-three times*, and drawn off in all *six hundred and twenty-eight gallons* of fluid. He concludes with the remark, that Mrs. A. is in the enjoyment of tolerably good health, and should nothing unusual occur, bids fair to live for years to come, and that her condition is much better than when the operation was first performed.

MARRIED.—Recently, in Green Co., Ga., one of our graduates, Dr. B. W. ALLEN, was married to Miss MATTIE J. BARNHART; the Rev. Mr. Killpatrick officiating. We wish the young couple much joy.

Very Respectfully
Yours &c.
Grover Coe

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PART FIRST.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*Lithotrity* versus *Lithotomy*. By Prof. Z. FREEMAN, M. D.

The question presented requires a careful consideration, or the student of surgery may be led to a wrong conclusion in regard to whether lithotrity or lithotomy is the better method for relief of stone in the bladder.

There are conditions, both constitutional and local, that will most unquestionably prevent the former operation; and such are not unfrequent in calculous cases, while the latter may be performed in nearly all cases presented, the exceptions being few and rarely met with. Some patients are fit subjects for either; it is then for the surgeon to decide which is the preferable method. Mr. F. Skey says: "If I were to select a case for the exhibition of the operation of lithotrity, I would take lithotrity as the rule and lithotomy as the exception," for with the crushing of the stone and its expulsion from the bladder, we avoid the necessity of cutting the perineum and urethra, as well as the dangerous circumstances attendant upon such an operation.

The term lithotrity is designed to express the process of boring or crushing the vesical calculus into small fragments, so that they may be voided with the urine. According to some authors, lithotrity means boring the stone, while lithotripsy is described as the process of crushing it; but I believe the most of them now speak of lithotrity as comprehending any method, whether boring or crushing, by which the stone is broken in pieces.

Lithotrity, like many other new operations, was first performed in a rude manner, necessity compelling the operator to resort to some method, however novel, that might offer a little hope of relief from constant suffering; and what was originated in such a rough and imperfect way has now become a standard operation. Celsus speaks of crushing or chipping the stone in the bladder, and afterward extracting it. Albucasis speaks of rolling the stone into the middle of the bladder, and, if it be soft, crush it. Sanctorius describes a three-armed catheter, with a file-pointed stillette; the stone was siezed, broken, and extracted. The Monk of Citeaux introduced an instrument, seized the stone, struck the end of the instrument, and thus chipped off some pieces which were afterward expelled. The next party mentioned is General Martin, who, in the year 1800 or a little previous, operated upon himself with a file placed within a catheter, having holes in its side, by which the file came in contact with the stones in the bladder, and in nine months' time they were broken up and expelled. In 1813, Gruithuisen suggested noosing the stone with a wire, and then boring it until it broke in pieces. In 1819, Elderton and Arnott did good service in illustrating the fact of the capability of the urethra and bladder to endure lithotrity. In 1822, Amussat and Le Roy busied themselves to a considerable advantage in this department. In 1823, M. Civale invented a three-branched boring apparatus for seizing and boring the stone; yet it was equally liable to seize the coats of the bladder, and thus has run into disuse.

Lithotripsy proper, or crushing the stone, owes its present degree of perfection to the instrument of Mr. Weiss, invented in 1824, composed of two blades, a male and a female, abruptly curved at their extremity, made strong, and able to bear a heavy pressure, being in diameter large enough to correspond with the largest dilatable size of the urethra. Other instruments, and, indeed, all recent patterns, are made upon the principle of Mr. Weiss' instrument, some of them working with a screw, some with a ratchet, and others, as Mr. Heurteloup's, depending upon pressure of the blades upon the stone, or striking the male blade suddenly with a hammer, and thus crushing it. Jacobson's instrument is sometimes used, but Weiss' has the preference.

There has been quite a jealousy existing between the principal performers of lithotomy and lithotripsy, each contending for the superiority of his favorite operation; but that has passed away, and all now unite in relieving the patient in the most ready possible manner.

Dr. Dudley, of Lexington, who has operated in lithotomy more frequently than any man in America, up to a short time since had never performed the operation of lithotripsy; and the same is true of many other eminent American surgeons.

Dr. Pancoast, of Philadelphia; Dr. N. R. Smith, of Baltimore; Dr. Randolph and Dr. Gibson, have given this subject more attention than any others of our surgeons. This operation was first performed in America by Dr. Depeyre, of New York.

Lithotrity recommends itself to the profession, from the fact, that where it can be performed satisfactorily, it obviates the necessity of cutting into the perineum and through the urethra and prostate gland, which must ever be attended with much danger to the patient, and is also much dreaded by him. Many lithotomists are successful in nearly every case, only the most aggravated ones terminating unfavorably. They have to operate upon such as are presented, while the lithotritist must always *select* his cases.

To operate successfully as a lithotritist, the condition of the patient must be carefully considered, and none but proper cases selected. The patient should be in well-developed manhood; should have no disease of the bladder or urethra; the urethra should be capable of being widely dilated; there should be no stricture, or if it should exist to a slight degree, it must be widely dilated. The bladder should not be irritable, and should be able to retain, with ease, six or seven ounces of water. The patient should have a tonic nervous system; beside this, the stone should be rather soft or brittle, and of sufficient size to be seized by the lithotrite.

Mr. F. Skey, of St. Bartholomew Hospital, London, has written an excellent article upon lithotrity, in the London Lancet, of October, 1859, in which he reports two very interesting cases, which should be read by all. His remarks upon this subject may be considered a proper guide for any one who may desire to perform this operation.

The operation is performed in this manner: Having selected your patient, as above described, and satisfied yourself by sounding the bladder, that it contains a calculus; that the symptoms indicate the phosphatic, or the uric, or some of the softer species, and not the oxalate of lime calculus (for the latter is generally too hard to be crushed); then prepare your patient by proper hygienic measures, for the operation. Quiet the nervous system by the judicious use of narcotics; dilate the urethra daily with properly-selected bougies, until it is of sufficient caliber to receive easily the lithotrite; pass the instrument into the bladder once a day, for two or three days previous to seizing the stone. By this means, you can judge of the condition of the bladder. When ready for the operation, allow your patient to retain his urine to the amount of six ounces, or if he has passed it on account of its inclination to excite urination, inject the bladder with about six ounces of barley water, carefully strained; seize the penis to retain the fluid, if it is inclined to pass; place your patient upon a bed, with the head and shoulders slightly elevated; administer chloroform, or not, as seems indicated, and proceed to oil and introduce the lithotrite. Be careful in your explorations, not to press too hard against the walls of the bladder, or you may wound that organ. Hold the instrument firmly in your hand, separate the blades, and grope around carefully for the calculus. Touch the walls of the bladder lightly, and soon the stone will become seized between the jaws of the instrument; now be exceedingly careful, hold the instrument steadily, do not force it against the wall of the bladder, but by the screw or the ratchet force the blades together, and thus crush the substance between them. Keep the instrument in the bladder only a short time, not more than five or ten minutes at a time; you may seize and crush the largest fragments, if there is no irritation induced; withdraw it, and as the urine is voided more or less of the smaller particles will pass with it. It may be necessary to repeat the operation a number of times, crushing the largest fragments, until all is voided. If inflammation of the bladder presents, correct it with the usual means. If particles of the stone lodge in the urethra, either extract them with the forceps or Civiale's instrument for that purpose, or force them back into the bladder; or if unsuccessful in those methods, cut down upon them, and so extract them.

I have not gone into a careful detail of the operation of lithotrity, its complications, and a history of such dangerous results as are sometimes connected with it. These you will find in full in all standard works upon surgery. Yet the statistics, as given by M. Civiale, of Paris, who has devoted more attention to the subject than any other Frenchman, may be very interesting. He considered that out of 831 cases of calculous patients, who applied to him during a period of twenty years, only 548 were fit cases for lithotrity, and 290 or more were not operated upon by this method—of the last 332 cases included in this list, 241 were lithotrized, 2 in 3-6 being considered unfit for that operation. Of the 91 cases not crushed, 28 were cut, and in 8 others, lithotomy and lithotrity were combined—of these 36 cases, subjected to lithotomy, Civiale lost just one half. Thus, to sum up the matter: Of all the cases in which M. Civiale used lithotrity—in all, 591—he had only 14 deaths; while the statistics of lithotomists show a larger amount of mortality. Other French surgeons have not been so successful. Of 162 cases operated upon by them, 100 were cured, 38 died, and the result of the remainder was unknown, or the cure incomplete. In the London Hospitals, the operation has not been so successful; also, in the Parisian Hospitals, Malgaigne says, 1 in 4 died, while in private practice the deaths were only 1 in 8. This is accounted for by the hospital cases being more severe, or, as I should suppose, not receiving the many kindnesses and attentions that interested friends and relatives can so tenderly and appropriately give. We find the same result in lithotomy in America, in private practice, compared with hospital practice. Dr. Dudley lost 1 in 36, of the private patients he operated upon; Martineau, 1 in 42; Dr. Mott, 1 in 50; and Dr. Nuttauer, 1 in 36½. These statistics are as favorable as Civiale's, and show how a selection of cases, and proper attention to them, may result in the cutting operation. Mr. Crosse reports the death of 3 in 23 of those who were cut, in the Norwich Hospital.

An interesting case presented itself to me for surgical attendance during the last winter, the history of which may be of value to the readers of the Journal:—

W. L. P., aged about 35, of sanguine-bilious-encephalic temperament, had been laboring under irritation of the bladder and urethra at various times for about two years. I attended him at intervals during a rather severe and prolonged attack which continued through the months of January, February, March and April, 1858. By the use of diuretics and narcotics, and the introduction of sesq. carb. potassa or Lallemand's port. caustique, he became, apparently, entirely relieved, and I did not prescribe for him again until October, 1859, when he again visited me with symptoms similar to the previous ones, excepting more aggravated. I did not sound the bladder at the time, but repeated the former treatment, giving freely of a decoction of uva ursi, buchu and althea, using fomentations of hops, poppy leaves and stramonium, and other appropriate measures; also, alternating ext. cicuta and ext. hyosciamus each in half grain doses. By these remedies he was frequently relieved, for days or a week at a time, until the symptoms of stone being so evident, I insisted upon an operation, if, upon sounding, one was detected. The urethra was somewhat swollen, very sensitive to the instrument, and slightly strictured opposite the collum, the suspensory ligament, and in the prostatic portion. By the use of bougies, introduced daily, coated with ℞. ext. belladonna, mild zinc oint. *aa*. M., and a little sweet oil upon this surface, I was enabled to dilate the urethra, so that the bladder could be sounded without causing much pain. Sounding the patient, detected a calculus with a rough or gritty surface, and so I concluded that I would crush it with the lithotrite. By persevering in the above course with the bougies, I dilated the urethra largely, and on the fourth day of January, 1860, after having gotten my patient into as comfortable a condition as the circumstances would allow, by diet, warm pediluvia, aperients, diuretics, narcotics and fomentations, I placed him on his back upon a narrow bed, and introduced the lithotrite. He had retained about six ounces of urine, which, as it seemed bland, I thought would be better than to annoy him by injecting any fluid as a substitute. The moment the instrument touched the bladder, before the blades could be separated, spasmodic action occurred and spouted the urine up by the side of the instrument nearly to the ceiling. (He had been subject to those spasms of the bladder, which gave him great pain, and it was for the relief of these that I had given the cicuta and hyosciamus, alternating.)

Holding the penis and urethra, only distended those organs. The bladder continued to contract upon the instrument until it was withdrawn, when the spasms ceased. I continued the previous treatment for a few days until the bladder seemed quiet, and then tried it a second time on the 9th of January.

This time I administered chloroform until anasthesia was complete. The patient having previously urinated, I injected a solution of morphine in tepid water, into the bladder, and again introduced the lithotrite. I could distinctly feel the stone, but the moment I attempted to open the blades, from the slightest touch, spasm would commence and continue until the instrument was withdrawn. I repeated the injection and introduction of the instrument four times this day, and at every time the water would be forced out, welling up and spouting by the side of the lithotrite until all was expelled, when, of course, the instrument had to be removed, or it might cause a severe wound or rupture of the bladder. Finding that lithotrity offered no relief to him, I decided upon the lateral operation of lithotomy. Had there been less sensitiveness of the bladder, I have no doubt but that I could have relieved him with the lithotrite, which would have been very desirable, and obviated the necessity of further operative interference. No unpleasant symptoms presented themselves, as a sequel to the severe use of the lithotrite; however, I used proper measures to prevent any.

January 13.—In the presence of a number of the medical class, and assisted by Dr. E. Freeman, I administered chloroform, placed him in the usual position upon the edge of an elevated bed, with the hands and feet tied together, and performed the lateral operation of lithotomy. The anasthesia was perfect—not a muscle moved. The incision was made in the usual place, commencing about two inches and a half anterior to the anus, and terminating a little posterior to it, in the middle of a line drawn from the anus to the tuberosity of the ischium. The knife was sunk deep into the tissues of the part, in search of the membranous portion of the urethra, opposite the posterior edge of a roughness or slight prominence on the bone, indicating the junction of the ramus of the pubis with the ischium. This is the guide I always have, and if the incision is deepened at this point, it is certain to reach the membranous portion of the urethra at the right place, and thus avoid the artery of the bulb of the urethra. I cut through the urethra and prostate gland into the bladder with the gorget, which I prefer to any other lithotome; for if you are careful, there is the least danger with this instrument. If you get the beak well inserted into the grooved staff, and then carefully pass it on into the bladder, while you hold the staff firmly, you can make an incision of only a certain extent, and there is no danger of cutting through the whole extent of the prostate gland, and wounding the bladder, or inducing terrible extravasation of the urine, behind or above the vesico-rectal ligament.

The stone was seized by the forceps, and readily extracted. It was composed of the urate of ammonia, and of a grayish-white color, its surface completely studded with very fine crystals, which could be easily rubbed off. Its shape was peculiar. It had a broad and nearly flat, circular base, about one inch and a half in diameter, the center being elevated into a neck about half an inch in length and three lines in diameter, tapering to the upper extremity, upon which was attached a head, which was circular, half an inch in diameter and nearly flat; it resembled somewhat in shape a shirt-bosom stud. I might here remark, that immediately after passing urine, he was subject to the most distressing spasms, and I presume the peculiar shape of this stone caused those symptoms to be more severe.

After inserting the tube, and fixing it by straps in the usual manner, I unfastened the hands and feet, placed him on his back, with cloths under him to catch the urine, a warm iron to his feet, and a solution of the Tinc. Aconite over the pubic region, and left him for the night.

Next day, January 14th, pulse 115 per minute; quite small, indicating nervous excitement; no pain; urine passes constantly through the elastic tube in the wound. He is not inclined to eat.

January 15.—Urine passes freely through the tube; at times the tube is nearly clogged with mucus; strong lithic and ammoniacal odor in the urine; much pain in the bladder and in the pubic region; patient very nervous; can not sleep; pulse indicates great nervous excitement. Gave—

℞.—Tinc. Valerian, ℥ ss.
Tinc. Hyosciamus, ʒ ij.
Tinc. Hamulus, ℥ ss.
Tinc. Xanthox. Frax. ʒ ij.
Ess. Peppermint, ʒ j. M.

Take a teaspoonful, every two hours and a half, in a little water. Continued the solution of Tinc. of Aconite to the pubic region, and allowed him to drink freely of a decoction of Buchu leaves.

January 16.—He still complains of pain in the bladder; can not sleep, although he is less nervous. I withdrew the tube about one inch, fearing that it might be the cause of the pain.

January 17.—Has less pain; withdrew the tube entirely; allowed him to lie on his side. The wound is glazed over with a deposit of lymph, and the urine passes freely through it. He seems quite comfortable; eats a little; has no pain. Have omitted the nervine since last night. He seems feeble, and has symptoms of ague. Prescribed—

℞.—Prussiate Iron, grs. x.
Quinine, grs. x.
Vinum Oporto, ℥ ij. M.

Take a teaspoonful every three hours.

Some urine passed through the penis to-day. The wound seemed swollen, and nearly closed. Ague symptoms much less, but his brain and nervous system are much disturbed; talks irrationally about irrelevant matters; leaves his bed when not watched; looks badly, skin presenting a clayish-yellow appearance. This condition continued for three days, but under the influence of the Quinine, Iron, Brandy, Wine and Ammonia, he gradually recovered. His system had become so enfeebled by the disease, previous to the operation, that it was exceedingly difficult for him to recover from the shock, but from this time on he continued to improve. For one or two days at a time the urine would not pass through the wound, but freely through the urethra with a considerable force; and then it would, for a few days, pass both by the penis and the wound, and in two weeks from the time of the operation it ceased to pass by the wound, and afterward the wound soon closed. He was shortly able to walk about the streets, and is now, and has been for some months, an able-bodied man, working at his regular business.

My object in penning this article was to direct the attention of the young Eclectic surgeon to lithotrity; for the fame given to the successful lithotomist has almost completely eclipsed the operation of lithotrity, which latter I conceive to be the safer and better operation, where it is *proper* to perform it. Major operations are apt to produce an intoxicating influence upon the minds of surgeons, leading them to neglect minor measures, that may often accomplish the same purpose, with greater ease and safety to the patient.

Mr. Allarton's lithotomy operation bids fair to supersede the lateral operation. It consists in cutting directly upon the grooved staff with a sharp-pointed, curved instrument, on the median perineal line; in front of the anus, cutting upward *instead* of downward. In the extraction of small or medium-sized calculi, Mr. N. Ward, who reports six cases which were performed successfully in the London Hospital, gives it the preference, as being a safer and much easier operation.

Cincinnati, No. 278 Sixth St.

ART. II.—*Diphtheria*. By Prof. J. KING, M.D.

Diphtheria, which is now so common throughout this country and Europe, is a very fatal disease, and although not a new one, it occurs much more frequently than in former years. It has a tendency to assume an epidemic character, and is, undoubtedly, contagious or infectious, as it appears to be communicated from one person to another. Children appear to be more liable to it, though it affects all persons indiscriminately, without regard to age, constitution, or occupation. Not unfrequently its attacks are sudden, without any premonition, terminating fatally in twelve hours, though many cases are prolonged to twenty days.

Causes.—The cause of this disease is not known. Some have viewed it as a malignant form of croup, but its character is essentially different; others have considered it a dangerous species of scarlet fever, but it does not protect those who have it from being afterward attacked with scarlet fever, nor does this fever protect from diphtheria. A microscopic parasitic fungus, the "oidium albicans," is found in abundance upon the diseased parts, but whether this is the cause, or the effect of the disease, remains yet to be determined. It appears to be a blood disease, or rather a constitutional one, involving the whole system, for it is frequently the case that a patient who is apparently recovering, and with whom all traces of false membrane have vanished, will be suddenly stricken with prostration of the vital powers rapidly terminating in death. The foul emanations from sewers, privies, putrid stagnant ponds, and the like, have considerable influence in developing the disease.

Symptoms.—The symptoms of diphtheria vary considerably in their character, both in the commencing and advancing stages, though the peculiar characteristics of the disease are, great prostration, and the formation of a whitish, thick, leathery membrane, which gradually extends into the air-tubes. The usual symptoms have been described by those writers who have had considerable experience in observing and treating the disease, somewhat in the manner I am now about to give.

In the majority of cases, it commences with more or less severe chills, followed by febrile symptoms, among which headache is the most severe, followed in a shorter or longer time, by a soreness in the throat and difficulty of swallowing, with an extreme feeling of depression. Sometimes, even in the worst cases of the throat affection, there will be little or no fever. Upon making an examination, the tongue will be found coated white, though sometimes it will be moist, and without any coating at first; the tonsils and other parts of the throat will be found swollen, and covered with the peculiar diphtheretic deposit,—the tonsils being hard and tender to the touch, or, in some cases, presenting a hollow ulcer with raised violet edges, and a dark, ash-colored slough on its floor. The disease gradually extends into the air-tubes, the breathing becoming hurried and catching. The accompanying fever is of an intermittent or remittent type. The pulse is quick, but will often be felt slow, waving, and very compressible. The urine is often abundant, and sometimes albuminous; obstinate constipation is usually present in the early period, but is soon followed by an offensive diarrhea. Sometimes the serous effusion in the cellular tissue of the face, neck, etc., will be so great as to entirely hide the eyes, or even prevent the patient's own clothes from comfortably fitting him. In many instances, the entire surface of the body will be covered with a rash resembling scarlatina; in strumous patients, the glands of the neck generally enlarge; and in the more serious forms of the disease, extensive abscesses form in the cellular tissue, or the feet and legs become perfectly black and cold, with large bullæ or blister-like swellings on them, containing a putrid fluid.

When the disease is of a mild character, there are generally febrile symptoms, loss of appetite, and, at first, only slight pain in swallowing; the tongue is coated with a white, thick, creamy substance, the papillæ being elevated; the voice somewhat thick and husky; the palate, tonsils, and fauces, are of a shining, bright red color, the tonsils being swollen with white patches upon one or both of them. The filmy deposit and exudation adhere very tenaciously to the submucous surface, and can not be easily scraped off.

The membrane which forms in this disease, is whitish or ash-colored, and may exist in patches, or these may run together, covering the whole surface of the parts. After it is perfected it commences to be removed, either in strips or by becoming softened, so that it mixes with the fluids of the mouth. It will often be renewed at the same spot several times in succession, each new membrane becoming whiter and thinner.

In the severe form of diphtheria, the fever is high, with a hot, pungent skin, flushed countenance, congested lips, a rapid, feeble pulse, great difficulty in swallowing, hurried respiration, and the tongue coated with a thick, whitish, dirty-yellowish-brown, or slate-colored substance, with great depression of the vital powers. The whole throat will be found of a deep, husky, erysipelatous redness, and the tonsils enormously swollen, with a large ash-colored membrane, like rough leather, spread over the inner side of one or both of them, and also upon the palate, or fauces. Most commonly, there will be a profuse exudation of a jelly-like, tenacious fluid, which hangs in the back part of the mouth like a curtain, and bursts when the patient breathes, sending its particles over the mouth, as well as over the instrument used to depress the tongue; the next moment another similar curtain is found, and so on.

As the disease advances, these symptoms increase in severity; the breathing becomes stertorous from the mechanical obstruction present; the swallowing becomes so painful that the patient will frequently refuse to swallow; the saliva dribbles from the mouth, and a foul, thin, acrid, and yellowish discharge often flows from the nostrils in more or less profuse quantity; the pulse becomes more rapid and feeble; the glands of the neck swollen and tender; the face also becomes greatly swollen; an attempt to open the mouth causes most excruciating pain; the voice becomes hoarse and indistinct, with a short, dry cough, and a puffed and blushy neck; all the previously red parts in the throat became covered with false membrane, which extends downward along the air-tubes. When the tonsils become livid and gangrenous, the breath is intolerably fetid. The patient lies upon his back in a half comatose condition, or may be restless and tossing about in the bed. Difficulty of urinating, suppression of urine, or even bloody urine, are apt to be present at this time. Death, which is often preceded by vomiting, ensues either from rapid prostration of the vital powers, or by asphyxia from the extension of the false membrane into the air passages.

Not unfrequently, in the beginning of the severe form, the patient will be seized, more commonly in the morning, with violent vomiting of a thin, yellowish-white, offensive matter, followed by purging of a similar fluid. These are followed by great prostration and stupor; drink is taken with avidity, only to be thrown up. Sometimes the patient will lie in a long, heavy sleep, and if he be awakened and asked if his throat be sore, will answer in the negative. The physician must not be mistaken by this answer, but must carefully examine the throat. In some cases, the disease is ushered in with a slight diarrhea and discharge of blood; or a bleeding from the nose may be an early symptom. In others, a stupor attends from the commencement, which passes away in from five to eighteen hours, and a delirium comes on, which is often of a violent character. The whole mouth is lined with the whitish deposit, so that, when open, it looks as though it were lined with plaster of Paris. After a time the delirium subsides, and then the vital forces fail rapidly; the horrible sensations of choking and suffocation come on; the sufferer tears at his neck with his nails, and tries to open his mouth; large, livid spots form on the extremities; a white, offensive matter is incessantly discharged from the bowels; low, muttering delirium ensues, and, in a long tetanic convulsion, death closes the scene.

Discrimination.—The patient has at first a slight cough, perhaps a hardly noticeable hoarseness of voice; the throat will be observed swollen on the outside. If the tongue be held down by a spoon, a little patch of membranous exudation, or false membrane, will be seen upon the fauces; and upon one or both tonsils will be observed a whitish membrane, about the size of a dime, surrounded by a shining redness. The membrane is thicker than that formed in croup, and is composed of the fibrin of the blood, coagulated and forming threads or filaments, having no cells proper, but a variable quantity of granules. Sometimes there are no fibers, the granules being all mixed up together. When the membrane is removed, it leaves the surface from which it is taken of a bright red, with an appearance not unlike raw meat.

Prognosis.—In strong constitutions, when the attack is mild, and treatment adopted at an early period, the prognosis is favorable. But in the more severe attacks, the prognosis is always unfavorable, especially if treatment has been delayed for a day or two after the symptoms show themselves. Vomiting in the latter stage of the disease is an indication that the disease has advanced too far to warrant any hope of success for the operation of tracheotomy. When albuminaria is found in the urine, the case is unfavorable, though not necessarily fatal. The longer the process of membranous formation continues, the more unfavorable is the prognosis; if it continues to the ninth or tenth day, even in apparently light cases, but few will be found to recover.

Secondary affections.—After the throat has recovered from the attack, the patient is exposed to secondary affections, which sometimes proves fatal. The patient becomes pale and colorless, the limbs pain him, the muscles become soft and flabby and lose their power, and he becomes very much enfeebled. Sometimes the arms and legs lose their power; the patient can not walk, or merely shuffles along, and is unable to seize anything with the hand and hold it. The mind is frequently depressed; there may be a want of appetite, with debility of digestive powers and costiveness. Neuralgic pains in various parts are common; sensation may be diminished or entirely lost; various parts of the body become œdematous, or gangrenous; the soft palate dangles like a dead curtain; swallowing, and even breathing, are extremely difficult; the pupils are dilated, and the sight impaired or wholly lost. The voice may also be nearly destroyed. All these symptoms are not present in any one person, but will be found to vary with different individuals, and the convalescent who escapes even one of them will be quite fortunate. Dropsical swellings, deafness, or temporary paralysis are, probably, the most common among these after effects of diphtheria.

Treatment.—The patient should be removed to a clean bed, in a dry, well-ventilated room, at a moderate temperature, kept sweet and clean, and no one should be allowed to sleep in the room except the attendant. All visitors or callers should positively be kept out of the sick room. The room should be charged with chlorine both day and night, which may be done by placing dishes of chloride of lime, or a solution of it, in the several corners of the apartment; some vinegar poured thereon will facilitate the disengagement of the chlorine.

If the patient be strong, an emetic at the commencement of the disease will prove highly beneficial; but if he be weakly or debilitated, or the disease has progressed beyond the second day, the emetic, as well as all debilitating measures, must be prohibited. If, however, the bowels have been constipated, they must be acted upon lightly, unless the treatment has been delayed until the third day, when all depleting means will prove injurious. An adult may take a mixture of equal parts of Compound Powder of Rhubarb and Potassa, Compound Powder of Jalap, and powdered Prickly-Elder bark, which may be given in drachm doses every two hours, until it operates. Children may take a mixture of Compound Syrup of Rhubarb and Potassa, three parts; Tincture of Prickly-Ash berries, one part, which may be given in fluidrachm doses every hour or two, or according to the age of the child.

The treatment which has thus far been found the most successful, is divided into local and constitutional. The *local* measures are to prevent the formation or extension of the membrane, for if this extends into the air-tubes, the patient will most certainly die. For this purpose, after having cleansed the throat and fauces of the membrane as much as possible, by gentle means, a solution of Nitrate of Silver, one drachm to an ounce of water, should be applied to all the reddened parts, especially those around the false membrane. Should the membrane spread, make another application in eight or ten hours. In ordinary cases, these applications should be repeated every day or two, weakening the strength of the solution as the membrane disappears. When the mouth is so swollen that the solution can not be passed to the parts upon a sponge or camel's hair pencil, it must be placed upon the parts by means of a shower syringe. During the time between these applications, the throat may be frequently gargled, washed, or showered with the following mixture:—

℞.—Chlorate of Potassa, ʒ ss.
Muriatic Acid, f. ʒ ss
Water, f. ℥ j. M.

Other washes have been successfully employed, to-wit: 1. Salt and Vinegar, half an ounce of each to a fluidrachm of hot water; this may also be injected up the nostrils when they are becoming obstructed. 2. A solution of Bicarbonate of Potassa in water, with some tincture of Prickly-Ash berries added. In some cases it has been recommended to apply, every six hours, to the parts affected, a mixture of one part of concentrated Muriatic Acid, and two parts of Honey. Borax and Alum have also been found efficacious in some cases. Borax and Honey, mixed with a little Brandy and water, has been recommended as a wash and gargle; and, after the false membrane has peeled off, a gargle made with Tannic Acid and water affords great comfort. A very excellent wash is a strong infusion of equal parts of Sumach berries, Geranium, and Wild Indigo root. Another valuable agent to destroy the fungus, is Sulphate of Soda, six drachms, dissolved in twelve ounces of the preceding infusion of Sumach berries, etc. A tablespoonful of this may be given three, four, or six times a day, and the mouth and throat be frequently washed with it. In many cases, the application of Tincture of Iodine to the diseased parts will be found superior to that of the Nitrate of Silver solution; it has a tendency to keep the tonsils in a softer and more healthy condition than the latter, the use of which seems to harden, as it were, these organs. Externally, the throat and upper part of the chest should be frequently and freely bathed with the Compound Liniment of Stillingia, or the Compound Liniment of Oil of Amber, etc.

The *constitutional* treatment is to give tone and nourishment to the system. Thus: good, strong beef tea, strong mutton tea, wine, wine whey, ale, boiled milk, etc. In some cases, equal parts of beef tea and port wine, or egg and port wine, to which some Tincture of Prickly-Ash berries has been added, will be found very useful,—giving either of these in tablespoonful doses every half hour or hour. In other cases, Tincture of Muriate of Iron—twenty drops for a dose—may be given in the wine, and be repeated every hour or two. Again, cases will be met with, and especially those in which there is great fetor of the breath, in which the following will prove the most beneficial:—

℞.—Chlorate of Potassa, ʒ ss.
Tincture of Muriate of Iron, f. ʒ ss.
Water, f. ʒ j. Mix.

An adult may take one half of this, alone, or in wine; repeating the dose every hour. The Sesquicarbonate of Ammonia will also prove a valuable remedy, in half drachm doses every three hours, for adults; it may be taken in an infusion or syrup of two parts of Peruvian bark, one part of Wild Indigo root. Wild Indigo root, in infusion, decoction, or syrup, or baptisin, should by no means be omitted in the treatment of this disease; as much should be given as the system will bear, either alone, or combined with Golden Seal, Geranium, Sumach berries, Barberries, etc. Quinia has also been found useful in some cases:—

℞.—Sulphate of Quinia, half a drachm;
Chlorate of Potassa, one drachm;
Dilute Muriatic Acid, half a fluid ounce;
Water, half a pint. Mix.

Give one sixth of this every hour or two, or even oftener.

Of course, the particular remedies used in any one case will be selected according to the influence they appear to exert upon the patient; the chief object being to invigorate the system. notwithstanding the presence of fever, quick pulse, etc., and to remove the parasitical fungus and overcome the tendency to gangrene by antiseptics.

Turpentine, taken every other hour, in doses of half a drachm. and also, every alternate hour, Carbonate of Ammonia, have proved efficacious. The Turpentine may be rubbed up, two drachms with the yolk of an egg, to which add enough simple syrup to make an ounce and a half of mixture; dose for an adult, three fluidrachms every two hours, in milk. The Carbonate of Ammonia may be dissolved, fifty grains in twelve fluidrachms of water, and one half taken for a dose, every two hours; also in milk.

The acetated tincture of Blood-root, either alone or combined with half a part of the acetous tincture of Wild Indigo-root, has been employed with success, both as a local application to the parts, and as an internal agent; it exerts, among other influences, that of lessening the pulse, when this becomes quick and rapid.

In cases where the patient is so low that he can not swallow, the beef tea and wine, half a fluid ounce of each, with tincture of Prickly-Ash berries, a fluidrachm, should be injected into the bowels every hour or two—for a child six years old; or the mixture may be thickened with Arrow-root. Milk or mutton broth may be occasionally substituted for the beef tea. And even where the patient can swallow, but does not take enough nourishment, these injections should be used. The so- of Chlorate of Potassa, preparations of Wild Indigo, etc., may frequently be beneficially administered by injection, using each time, double the quantity which would be given by mouth, and causing the patient to retain it as long as possible.

When gangrene is present, a wash or gargle of Pyroligenous Acid and infusion of Wild Indigo bark, equal parts of each, or one or two drachms of Chloride of Lime to half a pint of water, will be found very serviceable.

The after-symptoms, which appear during convalescence, require to be treated by tonics, alteratives, stimulants, diuretics, etc., according to their character. Tracheotomy is said to have been occasionally performed with success in severe cases of diphtheria.

September 25, '60.

ADDENDUM.

[Diphtheria is becoming so common throughout the country, we are daily receiving letters of inquiry relative thereto. We are pleased to offer to our readers in this number the above excellent article from the pen of Prof. King. We will now add two short communications upon the same subject, received some time since.]

By S. S. Cook, M. D.

There is no doubt in my mind that diphtheria is a constitutional disease, manifesting itself locally in the larynx, pharynx, etc. Adopting this view, I treat accordingly. Muriated Tincture of Iron and Quinine are the articles I have mostly used, and with the best success. Locally, I employ a saturated solution of the Sulphate of Zinc, from three to six times a day, following each application with a gargle of infusion of Hydrastis Canadensis. I have often also used the Tincture of Iron in place of the Zinc, with fair success. The Chlorate of Potash has failed in my hands as a specific, yet much good may result from its judicious use. Strict attention must be paid to the skin. The proportional mortality with me is about one to ten, but were I to include all the cases of slight pseudo-formations upon the palate and tonsils, I might say one to fifty.

By M. F. Williamson.

In my experience, diphtheria has not been fatal. My treatment depends on the age and general symptoms. If my patient has much febrile excitement, I give a mild emetic, following it with a mild cathartic. When I use a gargle:—

℞.—Hydrastis Can., Borax, Black Pepper, Salt, *aa* ʒ i.
Vinegar and Water, *aa* ʒ jj.

With this, gargle the throat every four hours.

When I use a stimulating liniment to the throat:—

℞.—Aqua Ammonia, ʒ j.
No. Six, ʒ j.
Tinc. Opii, ʒ j.
Tinc. Camphor, ʒ j.
Oil Sassafras, ʒ ss.
Olive Oil, ʒ j.

Mix and apply to the throat freely, and wrap a flannel cloth around the neck to keep it warm.

I have treated sixty-four cases as above stated, and have not lost one. There has been considerable diphtheria in this neighborhood.

Art. III.—*A Case in Practice.* By W. Gaines Bruce, M. D.

On the 22d of August, I was called to Miss Eliza Jane Hamblin, aged 19, slenderly built, dark complexion, dark hair, and of a predominently nervous temperament. She enjoyed good health from infancy until within a year or two past, during which time she had suffered more or less from indigestion. She was one of those individuals that never give up to a sick-bed until actually obliged to, and consequently I was not called for some days after she was first taken sick. Upon my arrival, I found her suffering intensely of what I then took to be pneumonia. There was a short cough; expectoration of a viscid, tough substance, of a greenish color; dull, deep-seated pain in chest; much tightness; respiration hurried and difficult, and inclined to lie upon back; skin hot and dry; pulse 104, rapid and full; much thirst; furred tongue; restlessness; urine red, scanty, and somewhat scalding; but there was no *headache*, that symptom, which was severely felt just over the eyes, across the forehead, having entirely left her, together with another important symptom, which was present at the beginning of the attack, before I was called, and which was characterized by great numbness of the hands. Here I was left in doubt whether or not I had a case of pneumonia, as headache had been a characteristic symptom of pneumonia in the generality of cases I had previously treated. True, as I have already stated, there was headache during the first of the attack, yet the nature of this headache—its being across the forehead just over the eyes, and having been accompanied by numbness of hands, lassitude, shiverings, and loss of appetite, with some fever—taken altogether, caused me to halt between the two opinions as to whether I had a case of enteric fever, or one of pneumonia. And yet there was a dull sound elicited upon percussion over the region of both lungs; bronchial respiration was plainly heard through the stethescope, with slight crepitation over the upper portion of each lung. What more could be wanting to safely prognosticate pneumonia? But the headache, etc., referred to, with which her sickness was ushered in, and the presence of a slight diarrhea of a dark greenish hue, which I should have mentioned before, made an impression on my mind that enteric fever existed, and death would be the sequel of the case. However, upon after-consideration, I pronounced the disease "*typhoid pneumonia*," and gave, to check the diarrhea, unload the liver, counteract any miasmatic influences that might be operating, and to reduce the febrile symptoms, the following

Treatment:—

℞.—Sulp. Quinia,	grs.	xx.
Leptandrin,	"	x.
Podophyllin,	"	iij.

M. Div. in chart. No. v.

Dose, one powder every three hours.

To relieve the pressure and tightness of the lungs and facilitate expectoration, I gave the following:—

℞.—Ipecacuanha, grs. iv.
Liquorice pulv. " xv.
Aq. Bull., f. ℥ iij.

M. Dose, teaspoonful every hour.

Directed fomentation of hops over entire chest, and extremities to be rubbed briskly in hot rum.

August 23.—Much worse; pulse 110; skin hot and dry; lips, tongue and throat parched, dry, and covered with a black crust, which was very hard and fissured; sordes upon teeth; breath very fetid; diarrhea worse; expectorant mixture produced nausea and vomiting; substance vomited was so similar to the fecal evacuations, I could discover no difference whatever between them; not quite so much tightness of chest; but my patient was fast sinking under the effects of the diarrhea, to correct which I gave—

℞.—Leptandrin, grs. v.
Opium pulv., " iij.
Ipecacuanha, " x.

M. Div. in chart. No. v.

Dose, one powder every hour, until three had been taken, when they were given every two hours.

To produce a determination to the surface, gave every two or three hours, at the intervals, the following powder:—

℞.—Sulph. Quinia,
Dia. Powd., *aa* grs. v.

Mixed for a dose.

August 24.—Diarrhea was checked; tongue looked a little better, but remained quite bad; skin was more moist; pulse 90, less fever of course; breath was still fetid; dry, hacking cough, now and then raising small quantities of thick, viscid, rust-colored slime, which was at times less tenacious, of a darker color, and mixed with what seemed to be epithelia scales, a very marked evidence of the presence of a typhoid condition; yet equally marked were all the other symptoms of pneumonia, as described above.

August 25.—There was, in the morning, vomiting of a dark greenish substance; a black diarrhea; both very fetid; tongue looked worse again; pulse 105; more fever. To check the diarrhea, I prescribed, as above, the Leptandrin, Opium and Ipecac., gave a vapor bath by means of hot bricks under bedclothes; continued Dia. Powd. and Quinia.

August 26.—In the morning, the diarrhea was somewhat abated, but grew worse in the afternoon, and by eleven o'clock the following night, it grew so violent I was sent for in great haste. Prescribed:—

℞.—Acidi Nitrosi, f. ʒ j.
Opii Tinct., gtts. xl.
Aquæ Camph., f. ℥ viij.

M. Dose, half tablespoonful every two hours.

August 27.—Diarrhea had very much abated, but there was considerable fever; throat sore; deglutition difficult and painful; tongue, lips, and whole mouth covered with dry, black crust; sordes on teeth. Gave—

℞.—Opii Pulv., grs. iij.
Camph., " " vj.
Ipecac., " " ʒ ss.

M. Div. in chart. No. xxx.

Dose, one powder once in three hours during the day, and two powders at once in the early part of the night. Still persevered in giving small doses of Quinia. Medicines were given in a solution of equal quantities of weak lime water, milk and mucilage of Gum Arabic, just enough to dissolve the powder; used as a common drink, mucilage of slippery-elm.

August 28.—Appeared much better in every respect; diarrhea had ceased; tongue was moist, had begun to clean; skin moist; deglutition and articulation easy; patient inclined to take nourishment. Continued treatment, having extremities frequently rubbed in hot rum and capsicum; also kept elm poultice on throat; sinapism across chest; fomentations of hot hops and vinegar to abdomen, now painful to touch, and when pressed upon gave rise to a gurgling sound, as if the whole contents of the intestines had escaped into the abdominal cavity, which I supposed arose from ulcerations of the mesentery. Continued treatment.

August 29.—In morning, still better. Continued treatment. In afternoon, complained of pains in bowels, as from desire to evacuate them; must be remembered that nothing had passed bowels since diarrhea was checked, and that I was loth to give anything to move them through fear either of a relapse of the diarrhea, or of hemorrhage from the bowels, now in a typhoid condition. However, ventured to give a mild injection, to the application of which the bowels refused to respond, and at 10 o'clock that night I was again called. Finding the injection had not yet operated, patient very restless, distressed, breathing very hard, and could only articulate with difficulty, I was apprehensive that further efforts would be useless, but prescribed a dose of Castor Oil, and upon leaving the house ordered another, provided there was no previous operation, to be given at 5 o'clock the next morning. To quiet restlessness, gave twenty drops McMunn's Elixir of Opium, which produces the sedative effects of the Opium, but does not at all interfere with the peristaltic action of the bowels.

August 30.—As there had been no operation upon bowels, another dose of Oil was given at 5, as ordered on previous night; was half past 9 when I arrived; no operation yet; pulse hardly perceptible; patient fast sinking, though perfectly rational; talked in quite a loud voice when spoken to; but still seemed greatly distressed. Upon auscultation, dry, sonorous and sibilant rales were heard. There was oppression in chest, sunken countenance, and a dull, sleepy expression of the eye. Of course, I gave no more medicine, as I knew it would avail nothing. Patient expired on the following afternoon at 2 o'clock.

[We question the propriety of administering three fifths of a grain of Podophyllin every three hours, in a case where typhoid symptoms were marked from the commencement.—Eds.]

ART. IV.—*Fevers and their Treatment.* By J. W. FAIN, M.D.

PROF. NEWTON:—Suffer me to lay before the readers of your priceless Journal, in rather a cursory manner, the main features of the treatment I have adopted in febrile diseases.

Most warm latitudes like ours, when they get moisture combined with the heat, suffer very much from fevers. It is not my object to write in regard to the cause of fevers, as a great deal more has already been written than is known—most that is found in authors being theories built on conjecture.

For the last five years, I have treated hundreds of cases, of nearly every form of fever. I do not have any reference to contagious or specific fevers, and have tried to discover a cause, and have come to an opinion that is satisfactory to myself, but I will not here burden your Journal with it. Suffice it to say, I consider all fevers, except the contagious, as owing to one and the same cause, working through different conditions of the human system; and, as such, I adopt one and the same treatment to combat their effects, varied though in regard to the circumstances of strength, age, sex, etc. Whenever called to a case of intermittent, remittent, or continued fever, I generally find the following conditions present:—

Liver torpid and sore, sometimes enlarged by congestion; stomach inactive and foul; spleen sore, or enlarged; skin completely inactive, the pores being closed by effete and diseased matter; tongue coated; skin and eyes frequently yellow. To meet indications, I make the following powder:—

℞.—Quinine and Salicine, 10 parts each.
Dover's Powder and Prus. of Iron, 4 parts each.
Podophyllin and Cayenne, 1 " "

Mix well together, and then if the fever is marked by periodicity, commence eight hours before an onset or exacerbation, and give every hour a dose consisting of six grains of the compound above, familiarly known where I practice as the "blue powders," and continue till five doses have been given. If stomach is very foul, I commence first by cleansing it with an emetic. If the kidneys are inactive, I use some diuretic.

Bathing, as a very useful adjunct, is also thrown in, and generally in warm water, made alkaline or saline. If this course should not stop the disease, follow up on the following day. and continuously, till successful. I have given this course in hundreds of cases, and it is very rare that a patient has to take a third course of it; generally succeeding with the first or second. But after the fever has been controlled, I still have the same course persisted in for some days, though in diminished doses. The dose I here recommend is for an adult, and corresponding changes must be made to suit age, etc.

I do not know that I ever saw a case of non-contagious fever that was not marked with periodicity, though there are some of which the remissions are so slight as to probably entitle them to the name of "continued." In the treatment of these I use the same preparation that I have mentioned for the others. I generally commence giving it early in the day, as it seems to act better, commencing that time of day. I then continue hourly to give it till some five, six or seven doses have been taken; then give a few scattered doses during the remainder of the day. On the morning following, if the fever seems not controlled, I commence again with the same, and continue its use as on the day past.

When taken in time, I have never found a case of fever but what would readily yield to this course.

I have but little patience for specifics, yet I have had such success with this preparation that, with me, it amounts almost to a panacea in the diseases mentioned.

PART SECOND.

SELECTIONS.

Dr. Horace Green and Catheterization of the Bronchi. By the Editor. (Read before the Medico-Chirurgical College, New York.)

(Continued from page 613.)

But my dissent from the paper is still more decided, when he comes to speak of the "advantages" of catheterism of the air-passages in *diseases of the chest.* These alleged "advantages," I maintain, are greatly over-stated by the author. In proof of which I refer to the following extraordinary paragraph on p. 12:

"This method of treatment, in this class of diseases, has been continued, more or less, since the report to which I have referred was made; and such has been the amount of success which has continued to attend this plan of treatment up to the present time, I am now ready to affirm, after an experience of many years, in a field of observation unusually large, that, *if I was required to relinquish all other known therapeutic measures, or topical medication, in the treatment of thoracic diseases, I should choose the latter, with hygienic means alone, in preference to the entire class of remedies ordinarily employed in the treatment of these diseases.*"

Here Dr. Green distinctly proclaims in italics that "topical medication in the treatment of *thoracic* diseases, with hygienic means, alone," are more safe and reliable than "all other known therapeutic measures," including the "entire class of remedies ordinarily employed in the treatment of these diseases." He even goes so far as to say that he would rather relinquish all other treatment than to dispense with *topical medication by bronchial injections*," etc., for he dwells in this connection upon his former paper on 106 cases of *pulmonary* diseases, treated by bronchial injections, etc.

But there is a vagueness and obscurity in his use of terms, very objectionable in a scientific paper, because unintelligible and inaccurate.

"Diseases of the chest," "thoracic diseases," and "pulmonary diseases," are all used synonymously, and "bronchial injections" the topical treatment for all. But hæmoptysis, empyæma, emphysema, pleuritis, pneumonia, hydrothorax, pericarditis, and the various diseases of the heart, all belong to the category of diseases of the *chest*, and are included among *thoracic* diseases. Yet the author certainly can not recommend "topical treatment by *bronchial injections*" in any one of these! And so also tuberculosis, which is generally a constitutional disease, as hæmatonosus, a disease of the blood, is the chief among pulmonary diseases; yet, even for this, topical medication is recommended, though a physical impossibility; for the mucous membrane accessible to bronchial injections is not the seat of the local mischief, nor can topical medication be applied to the tubercles, which are situated in the parenchyma of the lungs, beyond and above the bronchi, or their ramifications, being usually in the summit of the lung in "early pthisis."

It is plain, then, that these numerous diseases of the chest, thoracic and pulmonary, are not intended by the author to be included, when he expresses his preference for topical medication over all other means.

But Dr. Green's meaning is manifest, when he comes to cite authorities for the topical treatment at home and abroad; and it is remarkable that every one of these speak of its use in *topical* diseases, viz: in the throat, larynx, trachea, and bronchi. In croup, diphtheritic, and other kindred affections, Trousseau and other foreign testimonies are cited, as also Dr. Gay and others, of Boston; but they do not speak of diseases of the chest, or thoracic, or pulmonary diseases, but only of the larynx, trachea, etc., as in croup before or after tracheotomy.

My objections to this paper, it must be obvious, do not lie against *topical* treatment for the relief of *topical* diseases, for I have no prejudices against these, but the contrary. The application of the sponge, wet with solutions of nitrate of silver, sulphate of copper, or the preparations of iodine, to the fauces behind the epiglottis, or within the larynx, trachea, and bronchi, (or wherever the mucous membrane can be reached without undue violence), when this is the tissue involved, is justifiable, as Dr. Green has proved, and such is the corroborative testimony that this practice in safe hands need have no terrors to the physician or patient. But a reliance on this or any other local means, to the exclusion of general treatment, or except as auxiliary to the latter, in any *constitutional* disease, is pathologically and therapeutically an absurdity. Nor in tuberculosis will this and hygienic means be in any case a justifiable reason for the neglect of other constitutional treatment, as science and experience may indicate. Let topical remedies be restricted to topical diseases, and their utility will be unquestioned. But when any attempt is made to substitute these for, or to exalt them to pre-eminence over, general remedies in *constitutional* diseases, such teachings should promptly be met by demonstrating their erroneous character.

Finally, I object to the teachings of this paper, that what is called catheterism of the air-passages can not be performed with the "*certainty and facility*" here claimed for it, even by the author of the paper himself; while I admit that by multiplied experiments he has acquired a tact in its performance possessed by few. Yet, even *he* records in this paper that he often fails in entering the larynx, and has frequently thought he succeeded, and afterward discovered that he had mistaken the pharynx for the larynx, and entered the œsophagus instead of the glottic opening, injecting his solution into the stomach! And he candidly records this liability to error for the guidance of others; a palpable proof that neither certainty nor facility can justly be claimed for this difficult operation.

The cases I have cited from this paper itself show that there are anatomical and physiological difficulties in all cases, requiring that the parts concerned be educated to tolerate the introduction of the catheter, by frequent cauterizations with the sponge-probang, for days, and even for weeks, before the nerves become sufficiently insensible to admit it. Then the patient has to be taught to regulate inspiration and expiration, so as to aid its passage. Next, the instrument must be passed *quickly*, so as not to touch the border of the glottis, else a spasm follows, which arrests the progress of the operation, which must then be abandoned for the time. Hence, I deny that it is done with "certainty and facility" by anybody.

It is difficult for the operator, but it is more difficult for the patient to bear, as the cases narrated prove, nor can it be said to be free from danger. Death has followed it upon the inferior animals, and two fatal cases are reported, one in the hands of Trousseau, and one reported by the Committee of the Academy, occurring at Bellevue Hospital. Dr. Green has himself recorded several cases of very narrow escape from death, in his own hands. So that it can not be denied that instead of "certainty and facility," difficulty and danger should be substituted for these terms.

My practical inferences are, that this operation called catheterism of the air-passages is one which is only adapted to rare cases, not of pulmonary or thoracic diseases, ordinarily so classed, but of bronchitis, and analogous affections of the mucous membrane lining the air-passages. In these, Dr. Green has the merit of having demonstrated that it is possible, and proving its utility in the cases to which it is adapted. In his hands, and with selected cases, this treatment has been useful.

But the operation will be found difficult in inexperienced hands, and requires very great caution, for the reasons set forth in this paper so truly and forcibly.

The topical medication before and after tracheotomy, as in *croup*, and its employment in *diphtherite* and kindred affections of the mucous membrane lining the air-passages, by the means, and in the ways here described, constitutes a valuable addition to our therapeutic means. But no catheter is required ordinarily in any of these cases, the sponge-probang, as Dr. Green has shown, being amply sufficient.—*American Med. Gazette.*

A Case of Tænia Solium. By Dr. J. R. Dowler, of Beardstown, Illinois.

The subject of this notice is a daughter of Mr. Eb. Fish, of Beardstown, Ill., about six years old. The only point of special interest in the case, consists in the efficiency of the remedy—to me wholly new, and accidentally brought to my notice—which was used in its treatment.

I was treating a little brother of this patient, in the latter part of last July, a part of my prescription for whom was, as a drink, the mucilage of elm bark, made by putting pieces of the solid bark into water. The little girl was seen to be frequently eating portions of the bark during the day; the next morning after which, upon my visiting the little boy, the mother, with much anxiety, showed me a vessel containing something that had that morning passed the little girl's bowels, with bits of the elm bark, enveloped in mucilage, which, upon examination, proved to be about three feet of tape-worm. As I supposed the passage of the worm was accidental, and had occurred simply from the looseness caused by the bark, I proceeded to prescribe, what I supposed a much more potent anthelmintic, a large dose of turpentine and castor oil. The turpentine and oil were given several times during the three consecutive days, causing pretty active purging, but with no ---earance of any portions of the worm. The little girl being slender, and of irritable temperament, I was forced to desist from further active medications; and partly to allay irritation of the bowels, and partly to test the influence of the bark on the worm, I directed that she should resume the use of the bark as before, by chewing and swallowing in moderate quantities.

On visiting my new patient (this little girl), the succeeding morning, I was shown portions of the worm, mostly in separate joints, that had been passed over night. Feeling now some confidence in the *anthelmintic* powers of the elm bark, I directed the continued use of it, in the solid form, as before, while there should be any portions of worm passing. In my daily calls for some days, I had the satisfaction to learn that portions of the worm continued to pass, from day to day, and sometimes several times a day.

I now ceased to visit my little patient, intending only an occasional visit; but my confidence in the efficacy of the *elm bark* being so well established, I advised its use to be continued, even for two or three days after any portions of the worm should be seen in the evacuations. The portions of the worm expelled—even the separate joints—were alive, showing more or less motion; a sense of their presence in the rectum, from their action, seemed to urge the patient to go to stool for their removal.

Having given direction for the links or joints to be counted, care was taken to do so, by the mother; and from my notes of the case, taken on the 17th of September last (1858), I find that during about seven weeks of the intervening time, there had been expelled, by estimate (taking the average lengths of the joints), about forty-five feet of worm. At this time there had been no portions of the worm passed for two weeks, during which time the use of the bark had been omitted. The head of the worm with about fifteen inches of the body attached, had been expelled; but thinking that all portions of the worm or *worms* might not have been removed, I advised that the patient should resume the use of the bark. Very soon the next day, after doing so, further portions commenced coming away, among them one about six feet long, tapering to a thread-like termination.

The next time I took notes of the case was March 23, 1859, at which time my estimate of the entire length of the worm that had been expelled, footed up one hundred and thirty-five feet, whether of *one* or more worms, I am unable to say, as in the portions I saw, there were a head and tail, of what I supposed one worm. Since the last estimate, there have been joints occasionally evacuated.

This patient, when first treated, was thin in flesh—had been growing so for some two years—attended with the usual nervous symptoms, startings out of sleep, variable appetite, etc., but with no great departure from good health.

As to the influence of this very bland agent in the dislodgment of the tape-worm, in this case, I think there can be no doubt, whatever may be the *theory* of its action.

The mode by which this parasite maintains its position, must be by its verminous contraction, and adaptation of its flat surface to the inner surface of the bowels, thus preserving itself from being carried along with their fæcal contents, and cast off. That it should maintain its position by the force of *suction*, exerted by the mouth, as some authors have supposed, would seem to be absurd, when the great length of the animal is considered, and the forces in operation tending to its removal. The passage of portions of the worm, so promptly, on the use of the bark, and the ceasing to do so on discontinuance of its use—even while active purgative anthelmintics were used—leave no room to doubt its effectiveness, in at least this case, as a worm-expelling agent.

It seems probable that the bark, with its thick mucilage, so interposes between the animal and the inner surface of the bowels, as to prevent its lateral grasp on their surface, in consequence of which it is compelled to yield to the forces naturally operating, and is carried out with the discharges. But as my object was simply to state the practical *facts* in this case, I will offer no further reflections.—*N. O. Medical and Surgical Journal.*

The Physiological Action of the Chlorate of Potassa.

Dr. Lambert experimented upon himself and others with the following result. He found, 1st, that the chlorate of potash is absorbed and eliminated with great rapidity, and that it is eliminated unchanged (still in the form of chlorate), and consequently can not furnish oxygen to the system, as has been supposed. 2d, That the principal channels for its elimination are the salivary glands and kidneys. Traces of it are detected in the saliva within five minutes of its ingestion, and ten minutes later in the urine. At the end of a half hour the process is at its maximum intensity, and it persists from fifteen to thirty-six hours. The duration of the elimination does not seem to depend upon the dose. It was nearly the same with doses ranging from one to twenty grammes daily. Dr. Isambert has detected it in the milk of two nurses who were taking it as a medicine.

He has found it in the nasal mucus, the tears and perspiration. Its presence in the fæcal matters he regards as doubtful, but thinks there is reason for believing that it passes into the bile.

3d. Dr. I. has ascertained the following facts in regard to its physiological action:—

Doses of from one to four grammes daily produced no appreciable results.

Doses of eight or more grammes induced a decided impression, lasting two or three hours; this was accompanied by a saline taste, apparently identical with that of the chlorate of potash. Although less powerful than a mercurial salivation, the results of over-stimulation were apparent in a weakness of action of the salivary glands for five or six succeeding days. A slight alteration in the voice was noticed. The intensity of the salivary excitation was proportional to the dose administered.

The only constant effect upon the digestive function was an increase of the appetite. In one case, a slight pyrosis followed the use of a large dose, given in too concentrated solution. It never occasioned diarrhea, although the fæces were often tinged with green.

In high doses it possessed well-marked diuretic properties. Twenty grammes daily induced frequent micturition, and a slight sense of pain and weight in the lumbar region. The urine, during the whole time of its elimination, was *strongly acid*, and deposited urates abundantly.

It slightly increased the secretion of the pituitary membrane.

Its action upon the respiration, nervous system and circulation (the latter being in a healthy state) was inappreciable. When the circulation was unduly excited, it seemed to exert a sedative influence upon it.

No inconvenient effects have been experienced from taking large doses for several consecutive days. M. Socquet has taken thirty grammes (gr. 450) with impunity.

The facts above stated show that it acts in a manner similar to the iodide of potassium, and has little resemblance in its properties to the alkaline carbonates, among which, as a therapeutic agent, it has been classed.

Dr. Isambert devotes a large portion of his paper to the discussion of the uses to be made of the chlorate of potash in therapeutics. The results are precisely what one would infer from a careful study of its physiological action.—*Boston Med. and Surg. Jour.*

Bi-Tartrate of Potassa in the Treatment of Menorrhagia.

My attention was directed to the use of the above remedy, in 1848, by a communication published in *Ranking's Half-Yearly Abstract of the Medical Sciences*, from Dr. Sylvester. Former experience teaching me the inefficacy of the usual remedies in the treatment of menorrhagia, I determined to use it upon the authority given, when opportunity offered, knowing its inability to do *harm*, *if not beneficial.*

I may state that you may class me among the old fogies in medicine in this respect. I love the noble profession of medicine and appreciate its improvements, but am not one of those whose enthusiasm leads them to jump at the discovery of new remedies, especially when they are energetic in their action in the treatment of disease. Remedies powerful in their action upon the human system must inevitably do harm, if no good. Therefore, *ample testimony* should only justify a physician, in *private* practice, in using them, unless as a last resort.

Believing, as I have said, in the inability of the remedy to produce harm, if no good, in such cases, I commenced the use of it in menorrhagia, and have continued its administration, when my judgment dictated its necessity, for the last twelve years, with greater success than with any one known remedy in that disease. Its action is rational, and conjoined with rest in the horizontal position, diet regulated in accordance to circumstances, with perfect quiet of mental as well as physical exertion, its effects are beneficial and speedy.

I will give the following case of recent occurrence: — Was called on the 7th of this month (June) to see Mrs. J. C., age about forty, the mother of nine children, the youngest three years old. Has menstruated regularly up to October last, since which time she has been irregular and *profuse;* sufficiently so to make its inroads upon her constitution. She was pale and exsanguined when I saw her, discharging freely for the last five weeks. Thinking that it was kept up by a want of tone in the muscles of the uterus, and its inability to contract, I prescribed teaspoonful doses of vinum ergota, repeated four or five times in the twenty-four hours, promising to call in two days. Upon my return, I ascertained that the disharge had increased, if any difference. Her bowels being very costive, I prescribed the bi-tartrate with a two-fold object: to remove costiveness and check the discharge. I directed her to take three teaspoonsful of the medicine, and put it in a sufficient quantity of boiling water to dissolve it, adding sugar sufficient to make it palatable, to let it cool, and drink the quantity in twenty-four hours; when that was gone, to use more in the same way. She did as directed, and in thirty-six hours was entirely relieved; since which time I have heard of no recurrence of it. This is but one case out of numbers in which it has thus acted. —*Geo. Med. and Surg. Encyclo.*

Two Essentially Distinct Conditions of the Kidney giving rise to what is called Bright's Disease. By Mr. Dickinson.

The results of the author's minute examination of the kidney under disease, lead him to the conclusion that the conditions, called after the name of Dr. Bright, are capable of arrangement into two great classes; that in the one we have disease proper to the secreting surface of the tubes, while in the other the disease is essentially intertubular, and that the characteristic difference between the two is the presence in the latter, and not in the former, of external granulation.

The "tubular disease" includes all the varieties of the large smooth kidney; notwithstanding that pathologists have subdivided it, according to the predominance of some one material, into "fatty degeneration," "waxy degeneration," "desquamative nephritis," and many others.

There are two distinct stages: First, the period of enlargement; secondly, that of diminution. In the first stage, the capsule is thin and unadherent; the cortex is much, the cones slightly, enlarged; there is no appearance of preternatural vascularity. Parts, indeed, may be bloodless, giving a mottled aspect. The microscope shows the tubes entire; but in the cortex they are choked up with their epithelial secretion, which is often in various stages of disintegration, or fatty degeneration. These are probably consequences rather than causes of the derangement, and result from the cells, formed in excess from the inflamed membrane, being of unhealthy composition. In the cones there is the same tendency to excess of epithelial secretion, but it finds a readier exit, and does not, therefore, so often accumulate there. The tubes here show rather a tendency to become filled with a glassy, fibrinous material, studded with specks of oil, or cells of epithelium, which happen to be passing down, or blood corpuscles; and this is shed in the form of cylindrical casts. The casts, therefore, are formed almost exclusively in the straight tubes.

The second stage is rarely reached. It consists in an overstretching and bursting of the tubes one after another, those nearest the superficies being first destroyed; and it appears that their contents are then absorbed. The tubes collapse, and the organ may be reduced below its natural size. The capsule becomes thickened and a little more adherent. The surface is still smooth, the color unchanged. A section shows the gland to be chiefly composed of cone substance, and the remaining cortical substance is coarse, pale, and firm in texture, being reduced more or less to its fibrous nature; but there is no evidence of an increase of fibrous matter. The author agrees with Mr. Simon in believing that the cysts, often present in this condition, are developed out of epithelial germs, which are left on the walls of the ruptured tubules.

The "intertubular," or "granular disease," commences with slight thickening and adhesion of the capsule, with processes of fibrous-looking material passing from it into the interior of the gland; contraction of these follows, the points at which they originate become depressed, giving a superficial granulation to the exterior; and the tubes imbedded in them, at first healthy, become gradually reduced to microscopic threads.

In what the author calls "chronic intertubular disease," there is generally diminution of size. The adherent capsule has a tendency to split into two layers; the inner one consisting apparently of fibrinous effusion. The surface is granulated, and fibrous processes pass from the capsule between the granules. The fibrous tissue of the cortical part is increased, and the tubulous waste. Some of the fibrinous material passes into the interior of the tubules, lining them and displacing the epithelium. Cysts are often present, and evidently result from transformation of the tubes, not, as in the tubular disease, from a change in the epithelium.

In the "acute intertubular disease," the granules are larger and more distinct, and there is more fibrinous exudation between and into the tubules.

The anatomical evidence in favor of the intertubular origin of the disease may be summed up as follows:—

1. Near the capsule an effusion is often seen obviously between the tubules.

2. Tubes are caused to shrivel by some influence which travels independently of their direction.

3. Tubes are sometimes divided into cysts, which can only be accomplished by a contractile force, external to themselves. In the smooth kidney this never occurs.

4. In most cases, some of the secreting tubes are found natural, as if they had been out of the way of the effusions; whereas, in the smooth kidney all are involved.

5. A decided difference exists in the contents of the tubes in well-marked cases of each sort. In one they are filled by their own morbid secretion, in the other they are occupied by a ma

terial which is foreign to it, and which is probably derived from without.

Of 357 fatal cases in St. George's Hospital, of which the particulars were collected by the author, 250 were granular, 107 smooth; of the latter the average age was 28 years, of the former 50 years; proving that the one disease is not a sequel or stage of the other. In no single instance has he known or read of the granular form resulting from scarlatina; and it rarely results from cold. Gouty or rheumatic diathesis was associated with the granular form in seventeen cases, with the smooth variety in only one, and that doubtful.

In examining the kidney, beside the ordinary mode of tearing the organ into shreds and fibers, it is the author's plan to prepare translucent sections, so as to show the tubes and Malpighian bodies in their relations with one another, and to the intertubular material.

A portion of the kidney is boiled in water, slightly acidulated with acetic acid. It is dried, and when hard a section can easily be cut from it, which, on the application of water, resumes its former bulk, and presents a beautiful picture of the anatomy of the kidney.

Atropine in Epilepsy.

Dr. Max Maresch, availing himself of his position as physician of an establishment for the insane, at Vienna, has submitted some epileptic patients to the influence of atropine, and has published the results in the Vienna Journal of Medicine. Dr. Maresch's experiments were made upon eight patients in the female department, and ten more in the department of the incurable insane, four of these were men and six women.

Of the eight first patients, three were completely cured, and the condition of the five others was so notably ameliorated, that it was impossible to deny the beneficial effect of the atropine. Of the ten patients belonging to the class of incurables, eight experienced a marked diminution in the violence and frequency of their epileptic attacks, as well as in the exacerbations of their physical troubles. These results, united to those obtained by others in the treatment of epilepsy by atropine, merit serious attention.

Maresch has carefully noted the therapeutic phenomena which have arisen during the administration of this remedy. One-fiftieth of a grain of atropine gave rise, in every case, to effects which habitually follow the administration of this agent, such as dryness of the throat, difficulty in articulating, visual aberration, dilatation of the pupils, etc., phenomena to which by degrees the patients become habituated, which, however, do not cease during the entire treatment. In every case the pulse lost eight or twelve pulsations during the first hour after taking the remedy, but the pulse resumed its normal frequency so soon as the other therapeutic phenomena manifested themselves. There did not occur, in any case, a marked and permanent acceleration of the pulse under the influence of the dose above indicated. As special phenomena, Maresch observed in those cases while under the influence of atropine, an exanthem analogous to roseola, which soon disappeared under the influence of warm baths and the discontinuance of the remedy. It is, beside, worthy of remark, that atropine did not give rise in any case to digestive derangement or any other unfavorable symptom.

The administration of this remedy has not proved beneficial in the other forms of mental diseases. Dr. Maresch administers atropine as follows: He dissolves a grain of it in five hundred drops of rectified alcohol, and of this solution he gives from five to ten drops (from one-hundredth to one-thirtieth of a grain). This dose is administered once, in the morning before breakfast, from which coffee, tea, and chocolate must be excluded, as these substances interfere with its action. This is continued from sixty to ninety days without interruption; then is to be resumed after an interval of from thirty to forty-five days. With women, there is no need to suspend its administration during menstruation, as it favors and augments this discharge. Rarely does atropine give rise to constipation, more frequently to diarrhea, which necessitates, when it becomes severe, a suspension of its administration for some days. (*Translated from L' Union Medicale, by* S. E. C.)

[*N. O. Med. and Surg. Jour.*

Trousseau on the Diagnosis and Treatment of Hepatic Colic.

Professor Trousseau lately directed the attention of his clinical class, at the Hotel Dieu, to the frequency with which cases of hepatic colic are mistaken for other affections. Al though, in its severe form, hepatic colic is readily recognized, yet a slighter form, which is more common, especially in women, is very generally ignored. The reason is, that the pains caused by the small calculi are felt principally in the epigastrium, from which they radiate through the abdomen, the chest, the back, and sometimes even down the thighs. The practitioner, accordingly, is very apt to refer the pain to other organs than the liver, and, in particular, to ascribe it to a spasmodic affection of the stomach. This opinion appears, in many cases, to be further confirmed by the presence of vomiting.

M. Trousseau illustrated these observations by two cases, both women, of sedentary occupation, from forty to fifty years of age. In the case of the first, pain in the epigastrium, with vomiting of matter not containing bile, occurred two days before her admission into the hospital. The severe pain was succeeded by a feeling of languor and fatigue. The fœcal matters passed by this woman were collected, washed, and carefully examined, when a calculus of the size of a pea, consisting of cholesterine, was found. The second woman had been subject to "cramps of the stomach" for several years. These had been treated without success. When she came under M. Trousseau's care, she had been suffering for several days from attacks of severe pain starting from the epigastrium, and darting down through the belly into the right flank and into the back. These attacks came on two or three times a day, and lasted for from half an hour to two hours. On the 12th of March, the pains continued for five hours, on the 13th for eleven hours: they were accompanied by non-bilious vomiting, and on the evening of the last-mentioned day they ceased suddenly, and were succeeded by slight shiverings and well-marked jaundice. The bowels having been confined for some days, a purgative was administered: the fœcal matters were washed, and five calculi with polished facettes were discovered.

Before alluding to the treatment, M. Trousseau entered somewhat minutely into a consideration of the symptoms in these and similar cases. He laid it down as a general rule, that if, in addition to pains of the character described above, there be vomiting of matters not colored with bile, the symptoms depend upon the presence of a calculus in the common duct; and that, ninety-nine times out of a hundred, the presence of bile in the urine will next day confirm the diagnosis. It must, however, be borne in mind that, although the absence of bile in the matters vomited, and the subsequent occurrence of jaundice, entitle us to give a positive diagnosis, the opposite circumstances—namely, the presence of bile in the vomited matters, and the absence of jaundice—do not justify us in absolutely denying the existence of hepatic colic. In most cases the jaundice is so slight as to escape the attention of the patient; indeed, generally it is only by the condition of the urine that its existence is revealed. In addition to pain, vomiting, and the presence of bile in the urine, another diagnostic means is at our disposal. This consists in an examination of the fœcal matters: for this purpose, the evacuations are to be collected from the time of the cessation of the attack during the next three or four days, as a calculus may occupy this time in passing from the duodenum to the rectum. The matters so collected are to be washed in a hair sieve, until the solid matter is completely broken down. Under any other way of proceeding, the calculus might escape detection. It does not always happen, however, that the calculus, the cause of the suffering, is discharged. It not unfrequently happens that there are concretions in the gall-bladder which are too large to pass along the cystic duct. In such cases, the bodies get partially impacted in the duct, and give rise to much suffering; but on their going back into the gall-bladder, the relief is as complete as when they drop into the duodenum. In these circumstances, we are to be guided in our diagnosis by the sudden appearance and disappearance of the symptoms, taken in connection with the absence of symptoms pointing to disease of other organs.

With regard to treatment, nothing can be done to get rid of calculi already existing; our attention must, therefore, be limited to the treatment of the attack of hepatic colic, and to the preventing the formation of fresh calculi. The treatment of the attack is not very satisfactory, and often the remedies employed do more harm than good. Thus many practitioners prescribe opium; but as opium checks all the secretions, with the exception of the secretion of the skin, it is unfavorable to the accumulation of bile in the gall-bladder, which acts beneficially in helping the expulsion of the calculus. The pain, it is true, is deadened by opium, but the expulsion of the calculus is delayed. The relief of suffering is, according to M. Trousseau, more advantageously obtained by chloroform or sulphuric ether given internally, while frictions with an alcoholic extract of belladonna, reduced by water to the consistence of a syrup, are made over the seat of pain. The ether is generally given in the form of capsules, each of which contains eighteen drops; in this way a considerable anæsthetic action is produced, while the biliary secretion is not interfered with. Prolonged hot baths sometimes give relief, though in general they produce little effect. When the attack is past, M. Trousseau generally gives, with a view to improving the digestion, seven or eight pills daily, each containing three grains of extract of ox-gall.

The real treatment of these cases, however, is prophylactic. As above stated, M. Trousseau thinks we can not act upon calculi already formed, although M. Barth, supposes that, by a vegetable diet, combined with the use of alkalies and turpentine, biliary concretions may be disintegrated. All we can hope for, therefore, is to prevent the enlargement of existing calculi and the formation of new ones; and this we must do by impedding the production of cholesterine. Now, as cholesterine is a fatty substance, we must, in order to diminish its quantity, diminish all the fatty matters of the economy. For this purpose we must look to alkaline substances, which saponify the fats and render them more soluble; to exercise, which promotes their combustion; and to an alimentation which shall contribute as little as possible to their development. Peyrilhe, the first professor of Therapeutics in the Faculty of Paris, noticed that, in large herbivorous animals, such as oxen and cows, which are very subject to hepatic gravel, the gall-bladder was filled with calculi from the month of April to the month of June, and that it ceased to contain any from the beginning of September until the end of December. He thought that the production of cholesterine was favored in these animals by a dry alimentation, consisting in part of oleaginous grains; while, on the contrary, the chlorophyl, or green coloring matter of plants, acted as a special solvent of this fatty matter. Peyrilhe was right; but he had not noticed another important element in their cases—the influence of prolonged repose. In man, a sedentary life acts in the same way as stalling of oxen; and this is the reason why women are more subject to biliary calculi than men. Green vegetables, though acid, make the urine alkaline; they possess the property of saponifying fats; and you have thus, in exercise on the one hand, and in the use of green vegetables or alkalies on the other, the principal elements of the prophylactic treatment of biliary calculi.

To patients suffering from this affection, we should, therefore, continues M. Trousseau, prescribe walking exercise, a regimen having for its basis green vegetables, to which may be added lean meat and fresh fruit thoroughly ripe. The patient should abstain from eating oleaginous matters, such as fat of meat, butter, oil, milk; he should also partake sparingly of amylaceous or gelatinous matters, which, on account of the large proportion of carbon they contain, have the greatest analogy with fat. We may at the same time recommend the use of alkaline mineral waters, such as those of Vichy, the Mont Dore, etc. Not that these are to be given so as to saturate the system with the mineral principles of the waters, but only in such a way as to improve the general health. They should not be given continuously for too long at a time, but their use should be interrupted and again resumed.—*N. C. Med. Jour.*

PART FOURTH.

EDITORIAL.

STARTLING ANNOUNCEMENT TO SOUTHERN STUDENTS.

We notice that the "Medical Journal of North Carolina," edited and published at Edenton, by **Edward Warren**, M. D., has left the domain of medicine, and is luxuriating in the muddy stream of politics. The August number contains a flaming and stirring editorial appeal to Southerners to stay at home and patronize their own institutions, for political reasons. It represents the North and South as arrayed in bloody hostility against each other. It makes this section of the Union one grand pandemonium, and it transforms the majority of us into "base fanatics, who would desolate their homes with fire and the sword." It pictures in the most glowing terms how the Southerner who would at this juncture come among us, would be subjected to "insults such as his chivalrous spirit can never brook. His ears," it continues, "will be constantly assailed by taunts which must make his blood boil within his veins. He can turn his eyes in no direction, but some offensive banner or traitorous inscription will awaken his disgust or indignation; whilst the very fact that he is southern-born will make him the object of countless jests, and gibes and indignities from the despicable wretches around him, such as must involve him in quarrels and conflicts incessantly, if there be one spark of the true fire of manhood in him."

We think that will do for a medical journal, although it is a moiety only of what is contained in this flaming editorial. We pity the condition of medicine in North Carolina when one of its leaders so far ignores his own self-respect and the dignity of the profession with which he is identified, as to indulge in such foul vituperation and flagrant misrepresentations against the northern section of this Union. One of two things is evident. The editor has either never been out of sight of the smoke of his own chimney, or he entirely disregards truth, and is attempting to work upon the very worst passions of human nature for the sake of self-aggrandizement. We fear the latter is the true motive, for Dr. Warren has recently been appointed to fill the chair of Materia Medica in the University of Maryland at Baltimore, and this tirade of abuse against the North is indulged in to frighten southern students and draw them to Baltimore. Nothing can be more false than the statements that are made. We are glad to inform our southern friends that no matter what the inhabitants of New York and Philadelphia may be, we of Cincinnati have not yet been transformed into demons, armed "with fire and the sword," and breathing out threatenings of destruction against our neighbors of the South. We also assure those who choose to come among us, that they will not be the objects "of countless jests and gibes and indignities," but will be treated with all consideration and kindness, and their rights and opinions will be as much respected now as they ever were in former times. Dr. Warren has certainly lowered himself in the eyes of all honorable medical men, and we think he should labor to destroy this record which he has placed against himself.

A TRIBUTE TO GROVER COE.

An effort is being made by some of the members of our branch of the profession to raise funds for the purpose of rearing a monument in memory of the late Dr. Coe. Such a mark of respect would be highly proper in honor of one who, while he lived, labored so assiduously for the cause of Eclecticism, and who has left behind him, in his work and numerous contributions, such unmistakable evidences of his zeal, skill and observation. It is right that we should offer some evidence of respect to the memory of those who have devoted their time and energies to the advance of medicine, and who deserve to be ranked with the truly great. We hope that every Eclectic will feel it obligatory to contribute his *mite* in so good a cause. If any feel inclined to lend their aid, we will receive their contributions, and acknowledge the receipts through our journal.

DIPHTHERIA.

We call the attention of our readers to the excellent article of Dr. KING upon diphtheria, to be found in a preceding part of this number. The Dr. has since handed us the following, for the efficacy of which we can vouch, if adopted in time:—

"Prof. Stockwell informs me that he has treated the disease successfully by the following measures: In the early stages of the complaint, which is always accompanied by a soreness and swelling of the throat, let the patient use a simple solution of salt and water, as a gargle, every fifteen minutes. At the same time moisten a piece of flannel with a solution of the same kind, made as warm as the patient can bear it, and bind it around his throat, renewing it as often as the gargle is administered, and meanwhile sprinkling fine salt between the flannel and the neck. Use inwardly some tonic or stimulant, either separately, or if the prostration be great, use both together. The treatment, as may be seen, is extremely simple, and if used in the earlier stages of the disease, will effect a complete cure."

We hope that all our readers who have made any discovery in relation to the treatment of this dangerous disease will send us in communications upon the same as soon as possible.

ECLECTIC PHYSICIANS WANTED.

Dr. A. J. BARR, of Crab Orchard, Ray Co., Missouri, writes us that there are excellent localities for Eclectic Physicians in his neighborhood, and especially at Knoxville.

There is a broad field open in the West, and the demand for our class of practitioners is great. If any one desires to change his location for a western home and lucrative practice, let him address Dr. Barr, who will give all information and assistance necessary.

An Eclectic Physician, to take a practice of 1,500 to $2,000 a year. Address J. Milton Youart, M. D., Lafayette, Ind., for particulars.

THE WINTER SESSION.

The Winter Session of the Eclectic Medical Institute has opened with flattering prospects for a large class. We are glad to see that raising the fees to eighty-five dollars, has not prevented students from coming to the old "head quarters," where Eclecticism in its purity has been for so many years, and is still being taught with clearness and precision by the talented corps of professors who fill the respective chairs. Some were disposed to think that there would be a most lamentable falling off this session, but we were satisfied that the principle of Eclecticism is too deeply grafted in the public mind to be torn asunder by the weight of a few dollars. We did not expect that the class would be quite as large as it has been on former occasions. The influence of the money panic which lately oppressed the country has not entirely passed away. None of the Medical Colleges throughout the United States, except perhaps a few of those that still go upon the *no fee* system, are so crowded as they were formerly. Beside, the schools are multiplying yearly, and thus the competition is greater. Everything considered, we regard the school as in an exceedingly prosperous condition. The facilities for studying clinical medicine at Newton's Clinical Institute, together with the equal advantages with other students at the Commercial Hospital, render the Eclectic School of this city the most desirable to be found in America. Students should avail themselves of the opportunities thus afforded at the expense of great personal sacrifices and much labor, to study the only true and successful principles of practice.

A MEMORIAL TO JOHN HUNTER.

In 1859, the remains of JOHN HUNTER were discovered by Dr. Buckland, in the vaults of the Old Church in London, and were deposited in Westminster Abbey. The Medical profession in England, in consideration of the signal services he has rendered to posterity by his indefatigable labors, is raising a subscription for the purpose of erecting a fitting monument in honor of his memory. During the last sitting of the American Medical Association, a resolution was passed recommending that the different States collect subscriptions of not more than *one dollar* from all regularly educated physicians, to aid in the erection of said monument. The enterprise is a laudable one, and no man has more justly merited such a tribute of respect.

BIOGRAPHICAL.

Grover Coe, M. D., whose sudden demise was briefly noticed in your last issue, was born in Warwick, Orange Co., N. Y., July 20th, 1825. Immediately upon the death of his father, Dr. Elias Coe, who was a very worthy physician, young Grover Coe, whose mind had early sought its most congenial sphere, assumed the responsibilities of his father's extensive practice. Although but nineteen years old, he was able not only to successfully cope with his Æsculapian brothers, but to distinguish himself above them all. He continued to practice in his native town until the spring of 1847, when his ambition led him into the bustle and excitement of New York practice. A few months, however, convinced him that he had better yield to the earnest solicitations of his old friends and patrons, and return to his native town, Warwick, where his favorite science, Botany, could be pursued in a pure atmosphere, with pleasure and profit. Moreover, in his younger days, Dr. Coe required none of those unnatural mental *stimuli* which all large cities press upon their inhabitants. Naturally nervous and impulsive, it was but prudent to seek a quiet field in which to investigate medical science.

However, in 1851, he again removed to New York city, where he continued to reside and practice until a short time before his death. His health, which had been on the decline for several years, became much worse in December, 1859. Accordingly, he removed to Wilmington, N. C., hoping thereby to regain his health without retiring from practice. But disease, which even in childhood seemed to have selected him as a special victim, still clung to him. Within a short time previous to his death, he visited, in rapid succession, the "Alleghany Springs," "Red Sulphur Springs," and the "Sweet Chalybeate Springs," but received no permanent benefit from any of them. On August 4th, only two days after his arrival at the last named Springs, he expired. His remains were removed to his birth-place, Warwick, N. Y.

Dr. Coe was, for the most part, self-educated. He was chiefly distinguished in medical botany and therapeutics; though in physiology, pathology and surgery, his skill was above mediocrity. His numerous essays bear the impress of originality in thought and investigation, and if all his conclusions are not found correct, it must be remembered in extenuation that he was a pioneer, laboring in a difficult field, where his progress was bitterly contested at every step. His principal fault as an investigator, was his ardent zeal and enthusiasm—his haste to be right. If one may judge from his meritorious and voluminous articles, the concentration of remedies was his great forte; and, although the hand of experience, guided by rigid science, may yet repudiate some, and change the form of other remedies, which he regarded as quite perfect, yet all must allow that his labors were in the right direction, and that suffering humanity has ample cause to rejoice that such an investigator as Dr. Coe lived. H. D. G.

TO MY FRIENDS.

You will, no doubt, be gratified to learn that Dr. THEODORE GREVE, familiarly known to all the students who have attended the Eclectic Medical Institute since my connection with the same, as "Theodore," is now the veritable proprietor of a wholesale and retail Drug Store, having purchased the beautiful establishment on the corner of Sixth and John, formerly owned by John Dixon. No man in Cincinnati is better qualified to manufacture, select and dispense medicines, than Dr. Greve. Having been, for more than four years, the chief priest in the laboratory of T. C. Thorp, and having since occupied the same position in the mammoth laboratory of W. S. Merrill

& Co., no one can doubt, that he is perfectly familiar with Eclectic and Botanic Medicines. No one has contributed more light upon the chemical constitution of the concentrated medicines, or has done more toward perfecting the processes involved in their manufacture. I have now in my possession many articles manufactured by him, which are unequaled by any that I ever saw. All who have heard my lectures on chemistry, pharmacy, etc., know that I have never either lent or sold my influence to any particular manufacturer or dealer; and it is but justice to Dr. Greve and myself to state, that this article is penned entirely without his knowledge or consent.

PROF. H. D. GARRISON,
No. 597 Central Avenue.

SIR BENJAMIN BRODIE.

This celebrated London surgeon has become totally blind.

EDITORIAL ABSTRACTS AND CLIPPINGS.

The Number of Children a Woman Can Bear.—The question of how many children a healthy woman can bear, during the child-bearing period of her existence, is one of some interest. If a couple live harmoniously together during a long life, and marriage has taken place very early, it is quite possible that as many as 24 may have been born to the State, at intervals reasonably short, and without their coming as twins or triplets. Amongst the poorer classes this regularity is met with, although even amongst them a pretty large number of children are born. On looking over the Register of the St. Pancras Royal Dispensary since the year 1853, six instances occur in which over 16 children were born; thus, two patients, aged 42 and 46 years respectively, were each confined of their seventeenth child; one, aged 39, of her eighteenth; whilst three, aged respectively 39, 40 and 50, were confined of their nineteenth. The last patient, 50 years of age, beside her 19 children, had 4 miscarriages. In most of these cases the births were single, although occasionally twins were born. The greatest age was 50. Dr. Gibb states that, on a careful examination of the Register for many years back, the age of 50 is the highest at which any patient is admitted; and as the same patient did not present herself again, it is probable she ceased to bear children.

If the cessation of the catamenia determines the time at which gestation ceases, then it must occur in some instances as late as 55 or even 60 years; for M. Brierre de Boismont, who determined the critical period of life in 181 females, found that it occurred in 21 between 51 and 55 years, and in 5 between 55 and 60 years.

In considering the number of children a woman can bear, we of course here exclude those cases of multiple births, wherein from 2 to 6 children are born at one time, and which will thus swell the number of children brought into the world by one woman to as many as from 25 to 69.—*Lancet.*

Tobacco an Antidote for Arsenic.—A Woman's Life Saved by the Plant.—A young lady in Hampshire, England, fell into the mistake of eating a portion of arsenic, which had been prepared for the destruction of rats. Painful symptoms led to the discovery. An elderly lady, then present, advised that she should be made to vomit as speedily as possible, and as the unfortunate victim had always exhibited a loathing for tobacco in any shape, that was suggested as a ready means of obtaining the desired end. A pipe was used, but this produced no nausea. A large portion of strong tobacco was then chewed, and the juice swallowed; but this even produced no sensation of disgust. A strong decoction was then made with hot water; of this she drank a pint without producing nausea or giddiness, or any emetic or cathartic action. The pains gradually subsided, and she began to feel well. On the arrival of physicians, an emetic was administered. The patient recovered, and no ill consequences were experienced. Another case occurred a few years subsequent, at the same place, when tobacco was administered, and no other remedy. In this instance there was complete and perfect recovery. From this it may be reasonably concluded that tobacco is an antidote of very safe and ready application in cases of poisoning by arsenic.

A Bullet Discovered in a Man's Heart Eighteen Years After He was Shot.—A few days since a *post-mortem* examination was made upon the body of John Kelly, who resided in the town of Black Brook, N. Y. In 1842 he was shot at Chatham Four Corners, and the bullet passed through three boards before striking him; it entered his right shoulder, passed toward the heart and lodged under the collar-bone where it is united to the breast-bone. The veins were closed and the artery ossified at this place. The heart resembled a stomach as much as a heart. The right side, especially, was much changed, and seemed to be undergoing fatty degeneration. While examining the heart, a large lump was found in the lower part of it, and was found to be a leaden bullet. Fourteen years ago he was very dangerously ill, and not expected to recover. His difficulty at that time was inflammation on the lungs, and a most extraordinary disturbance of the heart's action. Since that illness his heart difficulty has continued to increase gradually; at times its beatings could be observed ten to fifteen feet distant.

Probable Exhaustion of the Supply of Peruvian Bark.—A gentleman long resident in South America states that there is some danger that the supplies of that very useful medical drug, Peruvian bark, and the still more useful sulphate of quinine obtained from it, may soon be exhausted. The cinchona, the tree which yields the bark, grows at a liberal hight on the slopes of the Andes, in various localities from Bolivar to New Grenada. In the latter country it is found on the central branch of the Cordillera, and the two best varieties have hitherto been those of Pitayo and Fanagamga, two New Granadian alpine districts. But these are already exhausted, and both in this country and England another and poorer kind, known as Amalgeur bark, which was at first totally unsalable, is now used to a very great extent.

The price of the best importations in the London market has gone up, within a few years, from 1s. 8d. per pound, to 2s. 6d.,and 3s., while the Almageur, for a long time refused by the dealers, is now readily purchased at 1s. 4d. A single tree yields from ten to forty arrobas, and it is calculated that it will take at least fifty years for the shoots of the destroyed tree to attain a middling size. The supplies from Bolivia, however, continue to maintain the highest rank, both in regard to quantity and quality.

New Anesthetic.—Dr. William H. Uhler, of falls of Schuylkill, at a recent meeting of the Academy of Natural Sciences, mentioned that he had, a short time before, accidentally inhaled the vapor of the bisulphide of carbon, which had produced complete anesthesia. He was removed from the laboratory by the workmen in a completely insensible condition. He revived in a short time suddenly and completely, and he did not subsequently experience any nausea, or the least unpleasant symptom. Whilst in a state of anesthesia, his visions were of the most pleasant and agreeable character.—*Phil. Med. News.*

Nocturnal Sweats.—M. Delioux, chief of the French naval surgeons, after numerous experiments with the different preparations of bark in the treatment of colliquative sweats, which occur during sleep in phthisis and other diseases, considers the tannate of quinine, introduced by Barreswil, the most appropriate remedy in this affection. This agent is supposed to be peculiarly applicable to two essential conditions in this symptom—organic debility and periodicity. M. Delioux cites many cases in support of his views. He administers this agent in two or three doses of six or eight grains during the afternoon. It is insipid, and causes neither wakefulness nor indigestion.—*L' Union Medicale*, No. 43.

Treatment of Gleet.—Every one knows how tiresome and difficult to cure a gleet may become, and how weary of each other both patient and surgeon grow in consequence. A little "dodge," which may not have yet crossed the channel, and which I have seen succeed here, when the whole armament of balsamics, injections and derivatives, had failed: Take a moderate sized wax bougie (the common yellow wax ones are the best), warm it slightly, and then roll it for a few seconds in well-powdered alum; when thoroughly whitened with the salt, roll it between the hands, so as to press the alum well into the wax, and the instrument is ready for use. Make the patient micturate previously, and then pass your bougie, without the the assistance of oil or cerate, as far as may be deemed advisable, cutting it off to within an inch of the orifice of the meatus, where it may be tied or not, and left for one hour each day. In this way a tiresome and refractory old gleet may be cured in ten days.—*Correspondent London Journal.*

Dr. Hackenberg, of Springfield, Ohio, in a paper "on the local treatment of gleet by compression," in the *N. A. Med. Chir. Review*, for September, 1860, recommends a treatment somewhat similar. He says: "The remedy that will fulfill in a great measure the indication in question, is gentle and prolonged compression by distension of the urethra. The instrument which I use for this purpose is made of different sizes, and is composed of ivory, or horn highly polished, and is simply a short bougie with a button or shoulder turned at one end to prevent it from slipping into the urethra. The following method may be observed in its use: Before its introduction, at bed time, the urethra should be well washed out with castile soap and water, followed by a mildly astringent lotion; an instrument of a size which will well fill the urethra, is then oiled, and with gentleness introduced. In a short time the passage will accurately and tenaciously grasp the instrument, and it is retained for the night without support or bandage. In the morning it is removed, followed by another cleansing process, which is repeated occasionally through the day. The application should be renewed every third or fourth night, until the cure is accomplished, which will occur after the third or sixth application. In removing the instrument in the morning, there is sometimes a difficulty in getting it out of the urethra—so firmly is it held within its grasp. A gentle rotatory movement, however, will soon disengage it, its exit being then readily accomplished by traction.—*Lancet and Observer.*

Quinine in Croup.—W. H. Baker, M. D., of Texas, Ky., says: "On the 15th of April last, about 11 o'clock at night I was called to visit a child suffering with croup. It was six miles to the residence of its parents, and I was told by the messenger that it was feared the child would die before I could reach it. He was still alive, however, upon our arrival, although apparently sinking very fast. Gave it ipecac, tartar emetic and hive syrup, but without producing emesis. I then placed the little patient in a tub of hot water, with the hope that it might produce relief, but to no purpose. The throat was then irritated with a feather, and cauterized with nitrate of silver, but still vomiting could not be induced. It was apparent to me that the child must die unless something was soon done for its relief, and having read in the *Journal* of the great efficacy of quinine in croup, I determined as a last resort to try it. I therefore administered a solution—one grain of quinine to a tablespoonful of water—a tablespoonful of which is swallowed with great difficulty. Its mother begged me to give it no more, as its suffering was so great. Its extremities were at this time quite cold. I however kept giving it the quinine, a tablespoonful every hour. A piece of flannel with turpentine was applied around its neck. After the third dose of the solution the patient broke out in a perspiration. This treatment was kept up for twenty-four hours, when it was administered every two hours for twenty-four hours longer, and then discontinued. The patient, who was about four years old, soon fully recovered.—*Nashville Jour. of Med. and Surg.*

Curare is being used in Europe for the cure of Tetanus, and has elicited a warm debate in the French Academy. Velpeau believes it to be a dangerous and useless remedy, whilst Bernard and Chassaignac have considerable faith in it.

Sex determined by the Movements of the Fœtal Heart.—Doctor Frankenhauser asserts (in the Monctsschrift fur Geburts-K) that whilst paying attention to the comparative frequency of the beats of the fœtal heart, before and during labor, he noticed that the heart beat with less rapidity in the male fœtus than in the female. The pulse in the former is on the average 124, in the latter 144. Upon these data the author has almost invariably predicted the sex.

If the assertion is true, the correct explanation of the fact will be very difficult: it is known that as a general rule the pulse of girls is more rapid than that of boys of the same age.

Lotion for Mentagra.—M. Richard has recently called attention to the good effects which he has seen from the application, in patients affected with mentagra, of a lotion composed of zinc and sulphate of copper in distilled water. After the employment of ordinary remedies, and when the affected part is cleansed from the crusts which cover it, the lotion is applied frequently; and under this treatment it has been found that the disease disappears in a comparatively short period.—*Br. Am. Journal.*

To Remove the Stain of Nitrate of Silver.—Immediately apply the common tr. of iodine with a camel hair pencil, covering the spot stained; then wash with a strong aqueous solution of iodide of potassium. As every physician is often using the nitrate of silver, and often, by accident, becomes stained by it, by using the above means it can easily be removed.—O. E. Newton, M. D.

Spermatorrhea.—Dr. Lucien Corvisart, a pupil of M. Chomel reports three cases of obstinate nocturnal, and even diurnal seminal losses, which were completely cured by the use of digitaline. We refer those who desire to learn the details of the treatment to Dr. Corvisart's paper.—*Bulletin de Therapeutique.*

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PART FIRST.

ORIGINAL COMMUNICATIONS.

ARTICLE I.—*A Case of Stricture of the Rectum, accompanied by Hemorrhoids, Syphilitic Ulcerations, and Prolapsus.* By Prof. EDWIN FREEMAN, M. D.

The following case in private practice presents such a complication of disorders, and illustrates so forcibly what is well known of the great power of endurance of woman in the many trying circumstances of her life, that I present it for the consideration of the readers of the *Journal*:—

January 8th, 1860.—I was called upon to prescribe for Mrs. B. A., aged 30 years. She said that she had been a sufferer for a long time, but had neglected to call upon a physician, because of the unpleasantness of the examination which she knew must necessarily follow. Several years ago, she had contracted syphilis from her husband, and had healed the primary sores, but had not been sufficiently particular in the constitutional treatment. Thus her ill health for some time had in some degree been owing to the secondary effects of this disease. For this, or to purify the blood, she had, at different times, taken a great variety of preparations, which her friends had recommended to her, until her stomach had become so weak as not to bear the presence of the most simple medicine. This was unfortunate, as, at the time I saw her, she needed very much to take something to eradicate the syphilitic taint, without which she could not hope to be perfectly cured.

She complained of great pain in passing her stools, and that often a small quantity of the fluid portion of the evacuation seemed to come through into the vagina. Her bowels were constipated, owing, I thought, a good deal to the fear of pain in the operation preventing her going to stool as often as she otherwise would. There was a burning sensation in urinating. She had a good deal of headache, and was often subject to attacks of neuralgia. There was a constant aching in the back, and whenever she sat over the chamber to urinate or evacuate the bowels, the uterus and bladder protruded to the ostium vaginæ, the latter appearing in front of the former, and most external, like a smooth and soft, compressible tumor, pressing the anterior wall of the vagina downward before it. This, of course, put the urethra on the stretch, causing irritation and the burning sensation spoken of, and making it often quite difficult to pass her urine. When she assumed the upright posture, those parts returned to their natural position. On examination of the vagina, I found a large patch of ulceration along the posterior surface, extending upward for an inch and a half, not deep, but indolent and unhealthy.

This was the local development of the syphilitic taint. Around the verge of the anus, there were five hemorrhoids, two of them being large and very red and sensitive, while the others were small, thin folds, not more sensitive than other portions of the integument. They were of long standing, and indurated by the deposition of fibrinous material into the cellular tissue, around the hemorrhoidal veins of which piles are usually formed. On close examination, I could not discover any appearance of a recto-vaginal fistula, although the patient seemed to think that one existed, but I ascribed the sensation she felt to the ulcer and the piles, which completely surrounded the anus. The indications for treatment seemed to be to relieve the costiveness and heal the ulceration, at the same time giving constitutional treatment, and get rid of the pile tumors; then use means to hold the uterus firmly in its place, which would also prevent the bladder from pressing down. I accordingly prescribed:—

℞.—A. B. Physic, ʒ j.

To be taken in a cup of hot water, to open the bowels freely. Also, for an alterative:—

℞.—Comp. Syr. Stillingia, ℥ iv.
Phytolaccin, ʒ ss.
Podophyllin, grs. iv.
Potassii Iodidi, ʒ ss. M.

A teaspoonful to be taken once, twice, or three times a day, as she could bear it.

I then rubbed the pencil of Argent. Nit. lightly over the ulcer, and ordered a wet cloth to be placed between the thighs, against the external genital organs.

Jan. 9th.—The physic had operated well. Ulcer seemed slightly inflamed. Applied the caustic again very lightly, to excite it to a more healthy action. Ordered a slippery-elm poultice at night to the external parts, to be followed by the mild Zinc Ointment to the surface of the sore.

Jan. 11th.—The mild Zinc Ointment seemed too irritating, and so I changed to the Meyers' Ointment, to be applied on a soft linen rag, or on raw cotton. I prescribed another dose of the A. B. Physic. The alterative medicine she thinks she can not take, as it sickens her. I then allowed it to be taken in broken doses of one half or one fourth, as it might agree with her.

Jan. 13th.—The Meyers' Ointment was producing a much better effect than the other; the ulcer looked more healthy, and was granulating around the edges. Some of the more unhealthy-looking spots I touched lightly with the caustic, and continued the Ointment. The physic sickened her so much, although it operated well, that she entreated me not to give her any more of it. I accordingly prescribed something that could be taken in smaller doses, and that would excite the biliary and intestinal secretions more freely:—

℞.—Neutralizing Cordial, ℥ i.
Podophyllin, grs. viij.
Leptandrin, grs. xvi.
Aqua Menth. pip. ℥ i. M.

A teaspoonful to be taken every two hours, until it operated.

I then prepared a ligature by twisting and doubling a piece of common saddler's silk, and passed it around the base of the largest pile, on the side of the anus. The base was broad, but the hemorrhoid was so prominent that the ligature could easily be tightened without slipping. This was done as quickly as possible, so that the sensation of pain was instantaneous, and after that the patient could rest. It is sometimes necessary, when the pile tumor is not very elevated with a broad base, to transfix the base with a needle armed with a double ligature, and, drawing them through, tie them on each side. I then gave her a little morphine, to quiet her pain, and left her to recline till the pain had subsided.

Jan. 14th.—Patient doing well. Pile tumor is very dark and nearly black and dead looking. I tightened the ligature, without her experiencing much pain. Her physic had operated well, and now, for the first time, she complained to me, that she had long been suffering from a great "bearing down" sensation, which was much more severe about the time of her "monthlies," which were very regular. This obliged her, at those periods, to recline most of the time, and when she would try to have an operation on her bowels, the suffering would be almost insupportable. Her fæces would come away in thin slips, after great effort, together with a quantity of muco-purulent matter, stained with blood. At other periods, she was comparatively free from the bearing down feelings, but the trouble in defecation would be the same. I at once suspected what the trouble was, and told her that she probably had stricture of the lower bowel (rectum), and that it would be necessary to examine the bowel before it could be positively determined. On account of what she was already undergoing in treatment, and the tenderness of the verge of the anus, the examination was deferred for a few days, till the tumor had come off and commenced to heal. I had noticed, however, on examining the piles previously, small spots of ulceration within the edge of the bowel, and had applied the Sesqui. Carb. Potassæ in powder, and after it the Meyers' Ointment on a little cotton.

Jan. 16th. — The pile, beneath the ligature, had ulcerated deeply all around, so that it hung by a very slight pedicle. This I severed, and it dropped off, being very dark, shrunken, and much decomposed. I rubbed the raw surface remaining lightly with the Nitrate of Silver, and had her use the salve as soon as the irritation had subsided.

Jan. 19th. — The ulcer is discharging freely, but does not seem disposed to heal. The fæces, in passing, irritate it very much. Touched it again with the Nitrate of Silver, and ordered a slippery-elm poultice, to be worn against the anus. The vaginal ulcer is doing well. Rubbed a little Sesqui. Carb. Potassæ on it, and continued the salve.

Jan. 24th.—As both ulcers were doing well, and all inflammation disappeared, I thought it best to make an examination of the bowel, and found, according to expectation, a close stricture, two inches within the border of the bowel. It seemed firm and unyielding, with a well defined central border. It extended entirely around the bowel, with an opening only large enough to admit the end of my little finger, and seemed to consist of condensed sub-mucous cellular tissue, produced by inflammation of the part, and subsequent effusion of plastic material into the cellular tissue. The mucous covering seemed tender, and the fæces pressing against it probably caused the muscular tissue to contract spasmodically still more closely, thus almost completely stopping their progress and causing the great pain and bearing down feeling. She was afraid that she would have to be cut, but I assured her to the contrary, and explained how that, by a gradual process of dilatation, I could gradually overcome the difficulty without resorting to so severe an operation. It seemed best, however, to extirpate the other pile tumor first, as it was very sensitive, and was situated at the anterior verge of the anus; so I ligated it, in the same manner as the other.

Jan. 25th.—I called and tightened the ligature, and as sensation had entirely left the tumor, she experienced but little pain.

Jan. 28th.—I found that the tumor had dropped off, leaving a small ulcer at its base, which was very sensitive. This I rubbed lightly with the Nitrate of Silver, and directed a slippery-elm poultice to be worn against it. Applied the Sesqui. Carb. Potassæ to the other ulcer, as also to the ulcer in the vagina, and continued the salve. I also directed her to use warm injections of Castile Soap water into the bowel, once a day, to keep the fæces soluble.

Feb. 1st.—Her menstrual flow had commenced, and she was not able to be about much. She said the ulcers were doing well, and were not painful. I did not see her again for a week, to operate, allowing her sufficient time to entirely recover from the excitement of that period.

Feb. 8th.—The bowel seemed a little irritable within. For this, I directed a cold infusion of slippery-elm, with a little Tinc. Opii, to be used twice a day by injection.

Feb. 10th.—Finding my patient as well as she could possibly be under the circumstances, and the ulcers doing well, I resolved to commence operations for dilating the stricture. The instrument I used (a rectal bougie) was made of whalebone, the portion adapted to the caliber of the strictured part being nine sixteenths of an inch in diameter, and about two inches and a half long, attached to a flexible handle of the same material. Such an instrument can be used in stricture in any portion of the rectum. I introduced the bougie very carefully, and allowed it to remain in the stricture about three minutes, not long enough for the pressure to produce irritation and inflammation, but only sufficiently long for it to excite to absorption. The cure of this kind of stricture is accomplished, not more by stretching the thickened and indurated sub-mucous cellular tissue, than by the pressure producing its absorption. Two days after, I introduced the same bougie, allowing it to remain about five minutes. She, in the meantime, had kept using the injections into the bowel.

Feb. 11th.—She thought she had her passage a little easier. Ulcer in the vagina was nearly healed. Those at the anus were doing well. I introduced a bougie one sixteenth of an inch larger, into the stricture. This treatment I continued for some time, generally introducing the same bougie twice or three times, with two, three, or four days intervening, as the circumstances seemed to demand, and then following with one a sixteenth of an inch larger. In this manner, I kept dilating it, until I was able to pass a bougie one inch in diameter. The bowel, by this time, had become very irritable, however, and considerable quantities of bloody mucous were passed. This was increased by a little imprudence in eating, which brought on an attack of diarrhea. This was, however, soon checked by a teaspoonful, every two or three hours, of—

℞.—Neutralizing Cordial, ℥ i.
Tinc. Xanthoxyli, ʒ ss.
Tinc. Opii, gts. xij.
Geranin, grs. xxv. M.

I suspended the use of the bougie now, and had her use injections of astringent barks. She anointed the bowel with—

℞.—Glycerine, ʒ ij.
Ext. Belladonna, grs. x. M.

The irritation gradually subsided, and the mucous discharge became much less.

The introduction of the inch bougie was quite painful, from its stretching the external sphincter and muscle to such an extent before it could reach the stricture.

In the *Medical Times and Gazette*, Aug. 6, 1859, p. 130, Mr. Armstrong Todd, Surgeon to the Marylebone Dispensary, describes an instrument made from his directions, by Mr. Ferguson, of Giltspur-street. It consists of polished steel, attached to a stem in such a way that they can be separated in a parallel direction, and, when closed, form a small-sized bougie, which can be introduced into the stricture within the sphincter, and then opened so as gradually to dilate the stricture. Thus the bougie, when once introduced, can be expanded to any size necessary, and the pain of introducing so large a one is avoided.

May 6th.—The ulcers were healed. I did not do anything with the small hemorrhoids, as they were not troublesome.

She had daily passages at her bowels, with more ease than for a long time before. Her appetite and general health had improved so much that she had become strong and quite fleshy. The vagina was sound, but there was still prolapsus of the womb and bladder, on sitting over the chamber. She tried the India rubber air pessary, but it not being sufficient for support, I had her use Blundel's pessary, with concave top, for a while, which kept the womb and bladder nicely in place. The vagina was too tender, however, to allow it to be worn long, without producing ulceration. I accordingly had her wear a perineal supporter, which consists of a nicely-fitting abdominal bandage, extending to the groin, and a perineal pad attached in front and behind, by elastic straps, which presses firmly up between the labia majora, and partially supports the internal genital organs. This I recommended her to use till the vagina healed and became strong enough to again use the pessary.

Cincinnati, Sept. 22, 1860.

Art. II.—*Hip Disease, or Morbus Coxarius.*—A Case in Practice. By O. E. Newton, M. D.

John Gault, aged 30; occupation, book-keeper. About one and a half years ago, I was requested by his father-in-law to visit him, and give my opinion as to the possibility of a cure. He was at that time living in Kentucky. I could then only give my opinion, which was favorable toward a cure. He soon removed to Cincinnati, when he placed himself under my treatment.

History.—When a boy, he dislocated his hip, and the dislocation not being properly adjusted, left his hip weak. Of late years, his leg seemed to become more affected until an abscess was formed and opened over the trochanter major, and continued to discharge freely; and this was the case when I was called to treat him. I found, upon examination, one general opening, from which some four sinuses were leading off toward different parts of the muscular portion of the hip.

Treatment.—I began the treatment by the use of the Sesqui

Carbonate Potassa as an injection, using it as strong as the part would stand, together with the internal use of the Compound Syrup of Stillingia and Iodide of Potassium—strength, ʒ ij. of Iodide Potassium to ℥ viij. of Compound Syrup of Stillingia. Dose, one tablespoonful, three times per day, mixed in a little water.

The wash was changed to the solution of Sulphate of Zinc; when the calloused surfaces were cut down by this application, the openings were enlarged by tents of dry cotton.

There was one general sinus, or tube, which extended down the leg to more than half the distance of the os femoris, which was lost deep within the muscles. In using the injection, it seemed to pass down into the tube to such a distance that it was difficult to press it out again. The principal pipe leading toward the bone, seemed to curve away from the bone in an angular direction, to form the perpendicular tube; or rather, the perpendicular tube, passing from above the knee upward, passed into the main sinus, formed by the external opening communicating with the bone.

After all the treatment from time of injections of Sesqui. Carbonate Potassa, Sulphate Zinc, Powdered Zinc, etc., had been used, still the tubes would not heal.

I then, with assistance, placed a ligature upon a silver probe, some sixteen inches in length, passed it down toward the bone, until the perpendicular opening was found, when the point was forced to enter it, and by severe pressure the point of the probe was made to take the course of the new tube. When the probe had reached the probable terminus of the tube—say about twelve inches—it was met by the use of a pointed bistoury, which opened down to the probe, when the end was drawn through, and the two ends of the ligature were brought together and tied. As in the treatment of fistula in ano, each day the knot was taken out and again tied more tightly; every day the ligature would cut from one half to an inch until the ends were brought together; each day the fissure made was filled with Sulphate of Zinc, made as fine as it could be pulverized. When the muscles were cut through, and the surface of the bone exposed, the whole opening was filled with the pulverized Sulphate of Zinc, until all the calloused surfaces were removed, which, when done, allowed it to heal. The fissure made by the ligature healed the fastest from the bottom; it gradually closed until it met the external opening of the tube that was directed to the bone; and here it refused to heal with any of the previous treatment, (the washes or the pulverized Sulphate of Zinc) which was freely applied, together with poultices, etc., as the case would require. Just around the opening, there would repeatedly appear a fungous formation, much like that which usually surrounds the external opening of a common fistula in ano, which extended over a surface of at least two inches. To reach this, I applied a paste of the Chloride of Zinc as fine as it could be made; then adding a few drops of water. To this, I added a little pulverized Hydrastis. This I put upon the fungous substance, over which dry cotton was placed; Adhesive Plaster over that; and over the whole, a slippery-elm poultice. This most effectually killed the fungus around the opening of the sinus, and destroyed all the former obstruction which had prevented the tube from healing. I then dressed it with the Meyers' Ointment twice per day, supported by adhesive strips. Gradually the last sinus was healed, and then my patient was discharged.

I have recently received a letter from him, which is very gratifying to me, as evidence of an occasional appreciative mind and a grateful heart.

The case, though tedious (being over six months under treatment), has been one very gratifying to me, as well as himself, and has done much credit to myself and the Eclectic practice, as his friends had abandoned all hope of his recovery.

ART. III.—*A Case of Medullary Cancer, Extensive Enlargement of Kidneys, and other Complications.* By M. R. TEWKSBURY, M. D.

DR. W. A. SNYDER, an Eclectic Physician, the subject of the following remarks, died March 4, 1860; aged 52 years. It may not be out of place to give a synopsis of the symptoms of this peculiar case for a number of years previous to death, as they were described to me by the widow of the deceased:—

At about twenty-five years of age, while living in the interior of the State of New York, he suffered a long time with ague and fever; and at about thirty-five years of age, he received a very bad cold, which so disabled him that his physician considered him beyond recovery. He coughed and expectorated very much, and for ten months was not able to speak a loud word; but suddenly and unexpectedly, he began to recover, and soon regained his usual health, with the exception of being much out of breath for a long time, when traveling up hill. He was slender in form, and had been subject to attacks of nervous headache about once a month. At the age of thirty-six or seven, he was attacked with a sharp pain in his left side, in the region of the spleen. This soon became of a dull character, and was accompanied by a dragging sensation about the region of the stomach. The usual quantity of fluids, even a cup of tea, would cause quite an enlargement of that organ (the stomach). About this time, he often showed strong symptoms of diabetes, and suffered much in consequence. He could not now ride on horseback, because of the jarring sensatio and pain in the back. At forty years of age, he would pas three gallons of urine in one night, after riding in a buggy the day previous. He therefore became much emaciated, and remained so, until he commenced his voyage of seven months around Cape Horn, for California, in 1849. Then those bad symptoms all disappeared; his health was good, and he increased much in flesh. When in California, in 1850, for a while he was in the butchering and meat business, but in consequence of being troubled much with numbness in his hands and arms, he took a trip to Nicaragua. As soon as at sea, his trouble left him, and when he landed there his health was excellent. He could ride on horseback almost any distance, for he rode a number of months without perceiving any injurious effects therefrom; but after a while, when his health began to flag, he thought proper to return to California, and, as usual, was well soon after getting out to sea. On arriving at California again, he commenced working in the mines, and continued that business until the fall of 1852, when he awoke one morning and found himself completely prostrated. Soon after this, symptoms of dyspepsia appeared, and continued until 1853, when he went to San Francisco and resumed his practice of medicine. About this time, the trouble in the left side returned; this lasted about one year, but not so severe as to compel him to abandon his practice of medicine. In California, when he suffered much pain, he made it a practice to use opium quite freely. At times he would complain of a dull, disagreeable feeling about the region of his stomach, accompanied now and then with a nervous, bilious headache; yet he was able to continue his practice, which was increasing. There was no material change in these symptoms until 1858, when he became peevish, requiring much attention. Although he was not conscious of this fact, his wife could easily perceive it.

About this time, he began to show symptoms of diseased kidneys, and passed more than a usual quantity of urine, although not freely, as he appeared to have lost his energy; he still retained about the same quantity of flesh. The pain now began to increase in the epigastric region, which caused him to suffer much at times, until the first of August, 1859, when I was called to consult with him in regard to his disease. I found him suffering with severe pain in the epigastric and lumbar region, accompanied with vomiting; his pulse was 90 per minute, hard and wiry; he also suffered with constipation of the bowels, and intermittent fever. There was also much tumefaction of the epigastric and hypochondriac regions; tongue clear, with a red margin; skin of a bronze tinge. My diagnosis was then, medullary cancer of the pylorus, with indurated and enlarged liver.

On the first of November following, the doctor removed, with his family, to a neighboring town, where I visited him from once to twice a week until his death.

From the time I was first called, he gradually failed. At times he would pass days feeling quite well; his appetite being good, he would take considerable food, but about twenty-four hours after he was sure to be attacked with severe pain in the epigastric and lumbar region, with vomiting, and general prostration, followed by fever; pulse quick and wiry; his urine, on first appearance, was a natural color, but rather scant in quantity; after standing a while, it was very fetid, and of a glutinous character. For ten or fifteen days previous to his death, he took very little nourishment, not more than a teacupful of beef tea in twenty-four hours, with a little wine occasionally. He was very thirsty, but nothing would permanently satisfy it.

Several physicians, both Eclectic and Allopathic, were called in consultation. Those who were most regular in their attendance were, Dr. D. L. D. Sheldon, of San Francisco, and Dr. Wentworth, of Brooklyn, Almeda county. Dr. Sheldon visited him once a week, for about six weeks previous to his death. The attending physicians agreed very well in their diagnosis of the case. Various remedies were tried with but very little hope, otherwise than to relieve present sufferings.

On the fifth of March, twenty-four hours after death, at the request of the family—it also having been requested by Dr. Snyder—Drs. D. L. D. Sheldon, Randall, and myself, proceeded to a post mortem examination. Having fully exposed the viscera, we found two large encysted tumors, their sacks being formed by the tunica adiposa of each kidney, thickened and strengthened by the vessels and white fibrous tissue. The tumor on the right side was very slightly kidney-shaped, involving the kidney, its capsule, and about six inches of the vena cava. It weighed seven pounds, and extended from the lumbar, on the right, to the hypochondriac, on the left, being anterior to the empty stomach, with the inferior portion posterior to the liver. It was adhered to the liver, over a surface about the size of a man's hand. On making a longitudinal incision through the tumor, the superior two thirds was found to contain a bloody serous fluid; the most of the other two thirds was composed of a medullary, cancerous substance, with the exception of nearly two thirds of the normal kidney and capsule, which retained a tolerably natural appearance. The other tumor was pyriform, and weighed seven and a half pounds, the apex of which contained the kidney and occupied the left lumbar region; the superior portion having been flattened and shaped to correspond to the diaphragm, to which it was firmly adhered; it occupied nearly the whole of the left hypochondriac region, involving the kidney and its capsule; about six inches of the abdominal aorta was attached to it; the spleen was also attached to it anteriorly, in a healthy condition. On making an incision through this tumor, it was found to consist of one entire mass of a medullary cancerous formation, interspersed with blood-vessels and white, fibrous tissue, with the exception of the kidney and capsule, which were in about the same condition as the one already described. These tumors were supplied with blood from the renal and supra-renal arteries, which were very much distended. We also found at the junction of the pylorus and duodenum, a medullary cancer weighing about two ounces, which nearly closed the pyloric orifice of the stomach. This portion of the stomach was much indurated, and gastritis had prevailed to some considerable extent. The inferior of the right lobe of the liver was much congested and indurated. The gall bladder and the ductus communis choledochus were considerably distended. We also found a tumor attached to the transverse colon, one attached to the rectum, and one to the posterior of the trachea about three inches above its bifurcation; these were about the size of a small hen's egg. Another was found surrounding the root of the right lung. Several of a smaller size were found in the lungs, and others attached to different parts of the bowels. A tumor was found in the right auricle of the heart, about three eighths of an inch in diameter, and one and a half inches in length. These were nearly all of a medullary cancerous character. The inferior vena cava was very much distended, and partially filled with the same formation, but of a darker color, intermixed more with fibrous tissue. Adhesion had taken place to a considerable extent over the right lung. The ureters were much enlarged, and necessarily elongated, in consequence of the unusually high position of the kidneys, caused by their enlargement. The bladder appeared to be in a healthy state.

Art. IV.—*Cynanche Gangrænosa.* By J. M. Swift, M. D.

I propose, in this article, to give, in brief, the symptoms, course, and treatment of a disease that has prevailed in various portions of the country, in severe or modified form, and which, for a time, created much apprehension and terror among the citizens of an adjoining village, where I was first called to notice it. Since that time, it has appeared in my immediate practice, reaching to my own family and myself. I do not know that what I have to offer will be new, or of service to any reader of the *Journal*, but as I have had an intimate acquaintance with it in all its forms, and in every case where a seasonable application of the treatment has been made, a cure has been effected; and in no other case, to my knowledge, has any treatment availed anything, I venture to give a few thoughts with reference to it, reserving its pathology as the subject of another article.

The first manifestation sufficient to attract the patient's attention is, generally, a chill, more or less severe, with fever and symptoms common to *sthenia*. There may, on the contrary, be symptoms more closely allied to those of typhous, with no active fever, or violent symptoms of any kind; but the former is almost uniformly the case. Some uneasiness and slight stiffness in the throat, may have preceded the chill, or may be noticed for the first with the accession of the fever. An examination will reveal a redness more, or less diffused, with irregularly circumscribed gangrenous patches, varying in size from a pin's head to six or eight lines in extent, sometimes interspersed or commingled with "aphtha" or "pellicula," such as would appear in diphtheritic pharyngitis. These may appear upon the tonsils, uvula, or velum pendulun, but more often the pharynx exhibits the first traces of the ulceration. In a few cases, there was swelling with phlegmatious inflammation, the gangrene appearing upon the second or third day; and in one case, suppuration preceded the sloughing. In this case, the form of disease under consideration was no doubt a supervention upon inflammatory sore throat, but in nearly every case the sphacelus appeared with no exalted irritation or engorgement. There is little or no difficulty in deglutition until extensive sloughing takes place; and in some cases, this proved no complete barrier to the act. In no case was there a return of the chill, and the active febrile symptoms subsided within the first thirty-six hours. Slight fluctuating symptomatic fever occurred during the course of the disease, but readily yielding to the use of Veratrum. The pulse, at first full and tense, became feeble, and accelerated as the disease progressed to a fatal termination. It was proportionately so, according to the failure of the vital forces, in every case. However, there was manifestly much muscular strength, enabling the patients to sit up unassisted, even after the whole structure of the neck, including the integument, had become spachulus. Dissolution took place on the fourth and fifth days of treatment. Age and sex had no modifying influence over the attack or course, the active symptoms abating in about five to six days, with speedy convalescence. It occurs alike to rich and poor. The success of the treatment will depend very much upon the discretion and efficiency in the use of the applications. Some experience is necessary to easily accomplish the great purpose, which is, to completely dislodge and remove every particle of the gangrene. For this purpose, I make use of the Sulphate of Zinc in powder, applied by means of the probang or some other instrument so constructed as to touch every point in the throat that may be diseased. The Zinc is the only article that has been effectual in forming a healthy ulcer, and, being a powerful antiseptic, it is valuable in a twofold sense. The Nitrate of Silver failed to accomplish any good in my hands. The Zinc should be applied long enough to form a slough, where the dead substance can not be dissolved, or dislodged with slight force. It may require several applications, and much fortitude, to accomplish the object, especially in children. When the line of demarcation is formed, the slough may be removed with some instrument. The ulcer should be washed with a solution of Chloride of Soda, or the gargle mentioned below. This severe treatment will seldom become necessary where the proper treatment is used at the commencement of the attack. I have found it better not to allow the apthous patches to remain, as gangrene generally succeeds them. They will be easily removed with the probang and solution of Zinc. When a gargle of the Zinc is used freely in the very first stages, it usually arrests the accession of severe symptoms. I have found the following preparation to act almost as a specific in many malignant cases, and I would advise its use in every case:—

℞.—Bark of Sumach Root (Rhus Glabrum);
Bark of Blackberry Root (Rubus Villosa);
Inner bark of White Oak (Quercus Alba);
Inner bark of White or Rock Elm;
Root of Wild Indigo (Baptisia Tinct.);
Bruised of each, ℥ ij.
Hydrastis Can.; Cemicifuga Rac., of each, ʒ j

Steep in sufficient water to obtain the strength; strain and reduce to one pint; make sweet with honey, and use often and freely as a gargle.

The pulse should be controlled with Veratrum. Tonics should be administered from the commencement of the attack, unless there should be considerable fever. I prefer Quinia to any other. The patient's strength should be supported by the most nourishing diet. Beef tea, or the extract of beef, answers a good purpose; also, ale or porter may be used. The fetor and putrid tendency of the disease should be counteracted by the solution of the Chloride of Soda, before referred to; or if this preparation is not at hand, a gargle of common salt should be used freely. Chloride of Lime, and other disinfectants, should be used about the apartments, as the violence of the disease appears to depend much upon the neglect of these precautions. Ice water, or bladders of ice, should be applied to the throat and neck constantly; and in some instances, a piece of ice held in the mouth, and allowed to dissolve, is grateful to the patient.

Northfield, *Mich.*, November, 1860.

ART. V.—*Scarlatina*. By Prof. J. F. JUDGE, M. D.

(Continued from page 588.)

The progress of simple scarlet fever is usually regular, and unattended with any dangerous symptoms; but occasionally complications occur, which render recovery less certain, and the appearance of unpleasant sequelæ probable.

Diarrhea is one of the more frequent complications, and when controllable, or but slight, does not necessarily involve much danger. But if persistent in its character, it may add much to the danger of the disease, since it produces exhaustion of strength, localization of the disease upon the intestinal canal, and may ultimately result in softening of the mucous coat of the bowels. Diarrhea sometimes occurs through the injudicious use of purgatives during the first week of the disease, in which case it not unfrequently determines an unfavorable termination of the malady.

Laryngitis is seldom found as a symptom in the mild form of scarlatina, but in the anginose and malignant varieties it is not an unfrequent complication, especially with adults whose constitutions may be broken down by excesses or the habitual use of alcoholic beverages. The inflammation may be of the plastic variety, and the thick, tenacious exudation, together with the œdematous swelling of the tissues may occasion death from asphyxia in twenty or thirty hours from the first manifestation of this complication. The inflammation may extend down the trachea and involve the bronchia, and occasionally the tissue of the lungs may become affected, giving rise to *pneumonia*. These latter are only of rare occurrence.

In the regular symptoms of the anginose and malignant varieties, pharyngitis has been mentioned. Occasionally the inflammation of the pharynx spreads to the eustachian tubes, and may extend to one or both ears, giving rise to very distressing symptoms. When this is the case, the patient is afflicted with partial or total deafness, which may be temporary or permanent in its character. Frequently the soft parts, and occasionally the bones of the ear, are partially destroyed by sloughing and caries; the latter may extend to the temporal bone and seriously injure its structure. These invasions of the ear are always accompanied by a discharge of an offensive character, and occasionally hemorrhage may occur from the same locality. The soft palate is in some cases so seriously involved as to suffer partial destruction, while the inflammation, extending to the mucous membranes of the eyes and nose, occasions much pain and suffering.

Epistaxis, or bleeding at the nose, is of frequent occurrence, especially in the more plethoric subject. This was a very common symptom of the epidemic of 1853, in Germany.

The cellular tissue and lymphatic gland of the neck are frequently involved by a spreading inflammation, and gangrene or exhausting suppuration may occur as a consequence, and hasten the death of the sufferer.

Pericarditis and *Pleuritis* may appear as complications, or as sequelæ. As complications in irregular cases, which are marked by an imperfect or suppressed eruption. As sequelæ, they more frequently appear after a mild case of the disease, and are usually accompanied by anasarca and urinary derangement, and are soon followed by effusion into the cavities of the pleura, and even into pericardium. It requires strict attention in the observation of young children, affected with scarlet fever, to detect the occurrence of these effusions; in fact, they frequently escape notice until the post mortem reveals their existence.

Peritonitis may occur as a sequela, seldom as a complication. It is usually accompanied by anasarca and affections of the kidneys; it soon terminates in effusion and death, unless promptly met by active and not depressing treatment.

The *joints* are sometimes the seat of disease, and may have effusions take place within them, being accompanied by severe pain, and sometimes permanent injury of the articulation.

Dropsy is the most frequent, as well as the most fatal of the various sequelæ of scarlet fever; and owing to the insidious manner of its appearance, is very justly the cause of more dread than any other, especially as its discovery may not occur until after the death of the patient has actually taken place, or is imminent.

Effusions may take place in the serous cavities, or the cellular tissue, or may involve both. Most frequently anasarca makes its appearance; it usually commences about the eyelids and face, but may first appear at the ankle, feet, back of the hands, scrotum and penis, or the vulva. Commencing at either locality, it gradually spreads until the whole surface of the body is involved, and then frequently invades one or more of the serous cavities. Of the cavities, the abdomen is the most frequently invaded; next, the meninges of the brain, then the pericardium and pleuræ. The effused fluid varies in character in different cases, and in different tissues of the same subject; it is usually more albuminous when found in the serous cavities, than that deposited in the cellular tissue.

During the scarlatinal dropsy, the secretion of urine is sometimes greatly diminished or entirely suppressed. It is in such cases that all the alarming symptoms of *uremia* occur, such as convulsions, delirium, and coma.

Diagnosis.—Scarlet fever can not be confounded with any other diseases, except measles or rubeola. In measles, the erup tion is in the form of small circular spots, somewhat resembling flea bites; when in clusters, or confluent, the patches are smaller. The skin is less hot and dry in measles, than in scarlet fever. The pulse is but little disturbed in measles, while it is almost always quite rapid in scarlet fever.

The *fever* is less persistent in measles than in scarlet fever; in the former, it almost always disappears as early as the eruption; in the latter, it frequently continues many days after desquamation has set in. The fever in scarlatina is more persistent than in any other exanthematous disease.

The *eruption* in scarlet fever is of a bright scarlet color, and in large blotches. In measles, the spots are small and of a darker, or raspberry hue. In roseola, the irregular spots are of a rose color, and differ much from those of scarlatina. It is seldom ushered in by much febrile disturbance.

The *throat*, in measles, may be dry, but is seldom much inflamed; in scarlatina, it is early affected, the fauces becoming red and hot at an early period, while the tonsils are swollen, and shortly afterward may become ulcerated. The tongue also becomes red at the point and edges, soon presenting the strawberry appearance so characteristic of the disease. In scarlet fever, sneezing, coryza, and cough are seldom observed; while sneezing, inflamed and watery eyes, coryza, and dry cough, soon followed by expectoration, are the almost constant initiatory symptoms of measles.

The premonitory symptoms in scarlet fever seldom continue more than one day, while in measles they continue about three. It should, nevertheless, be recollected that the premonitory symptoms in different cases of scarlet fever may vary from twelve to sixty, or even more, hours; so that we should be careful how we risk a diagnosis on this evidence. The prevalence of one or the other of the diseases in the same family or neighborhood may facilitate the determination which disease we are to contend with; but it should be always borne in mind, that until the anginose or eruptive symptoms occur, we can not positively diagnose between scarlatina and measles. If the the premonitory fever is very severe, it may be mistaken for meningitis. Hence it may be well to recollect, that in tuberculous meningitis, the pulse is constantly slow and regular, while in scarlatina it is rapid.

Prognosis.—Since the types of this disease may vary from the mild to the malignant, it is readily perceived that no general prognosis can be made. When the disease is uncomplicated, unless unfavorable sequelæ should occur, the prognosis should be favorable, yet always qualified. If convulsions occur, they are unfavorable, and lessen the chances of recovery. When the general symptoms in cases are similar, the imperfect or tardy appearance of the eruption requires a less favorable prognosis than in those in which the exanthematous symptom is well and early developed. The sudden disappearance, total or partial, of the eruption, as well as its becoming of a livid or purple hue, are symptoms of imminent danger.

The appearance of plastic effusions in the fauces or larynx, of gangrenous spots, severe coryza, typhoid symptoms, hemorrhage, or obstinate diarrhea, all tend to lessen the prospect of recovery. In making up our prognosis, the anginose difficulties should never be forgotten.

If the disease occur in a pregnant or parturient female, the prognosis is always unfavorable, for pregnant females seldom escape miscarriage, and the parturient seldom recovers. Finally, all cases of simple scarlet fever may be expected to terminate in health, while every departure from the simple type renders the result less certain.

Treatment.—The simple form of the disease needs little or no treatment, in the majority of cases. Very few would terminate fatally if no medicines were administered; and it should be recollected that so far as regards this mild variety, the remark of Sydenham, that it "*is fatal only through the officiousness of the doctor*," is a very near approximation to the truth. If the attack commences with nausea and a continued desire to vomit, a mild emetic may be given, such as a mixture of Lobelia, Ipecac and Capsicum; but unless indicated either as above, or by the presence of an accumulation of thick mucus in the throat, when the child is too young to remove it voluntarily, emetics are not needed. If the fever is hot, and the pulse rapid, the use of diaphoretics will be indicated, and for this purpose the Compound Tincture of Serpentaria is a very good agent; to reduce the arterial action, Veratrum Viride may be resorted to, the dose being from one to three drops, repeated every two to four hours.

Some writers recommend the use of cathartics and saline purgatives in scarlet fever; but the young practitioner, having a reputation to establish, or the old, one to retain, had better avoid such unwarranted interference as the production of active purgation. If the bowels become constipated, and there is reason to suppose that there is an accumulation of fecal matter in the bowels, acting as a local irritant, it may be necessary to promote defecation. This can generally be accomplished by the enema. An injection of soap-suds and molasses, or, if that fails, one of the same materials, to which some Castor Oil or Tincture of Prickly-Ash berries, or other stimulant, has been added, will almost always be found successful and safe. If this should fail, a dose of Olive or Castor Oil may be given, care being taken to counteract any undesirable activity of the bowels.

The use of stimulating or demulcent diuretics are always indicated. Spirits of Nitric Ether and infusion of Marsh Mallows, are my most common remedies to meet these indications, but others may be resorted to with advantage. The importance of early re-establishing the two great depurating organs—the skin and kidneys—in the performance of their functions, is frequently overlooked in the treatment of the severe forms of the malady. Whenever the urine is thick, scanty, or suppressed, it should command the medical attendant's special attention, and he should early apply those measures most likely to restore the normal action of these all-important organs; for the retention of urea in the system, is a frequent cause of the cerebral complications met with in this disease.

When the anginose symptoms are mild, they do not demand much active local treatment. The physician should, at every examination of the case, examine the throat, and if the inflammation is spreading, becoming dark colored, or contains whitish spots, the use of local treatment is necessary. The gargle of a strong infusion of Capsicum will be frequently found beneficial. Infusion of Capsicum, vinegar and salt may be used. Solution of Chlorate of Potassa, or the latter added to infusion of Hydrastis Canadensis, will often produce satisfactory results. Astringent gargles may also be used, such as a preparation of Oak bark, Geranium Maculatum, or Krameria. When the patient is too young to use the gargle, the same remedies may be applied by a sponge fastened to the end of a piece of stick or whalebone. Occasionally the cauterization of ulcerated spots with Nitrate of Silver, may be resorted to, but usually will not be required. When it is thought desirable to use it, the solution should contain only ten to fifteen grains of the Nitrate of Silver to the ounce of water.

Externally, stimulating liniments may be applied to the neck, with friction; afterward covering the part with flannel to keep it warm. The application of a cloth to the throat, moistened with solution of Chlorate of Potassa, and kept covered so as to retain the moisture, will often prove beneficial.

The use of *Sulphate of Quinia* is always indicated in the anginose and malignant varieties; it is the most reliable agent in the materia medica as a febrifuge and tonic during the eruptive and desquamating stages of the disease. Where there is much debility, it should be accompanied by stimulants, such as Sesqui Carbonate of Ammonia, Wine, Gin-Sling, Capsicum, Prickly-Ash berries, etc. The use of a saturated solution of Chlorate of Potassa as a drink, whenever the patient is thirsty, will be found very advantageous in the anginose and malignant forms. It probably acts as an oxidizing agent, facilitating the elimination of noxious material from the blood.

The surface of the body should be thoroughly cleansed once or twice a day, by tepid or cold sponging, with solution of Soap or Bi-Carbonate of Potassa, so as to keep the skin in good condition; and thus we relieve the kidneys and lungs of the excessive labors required of them during the arrest of function in the skin.

The patient should be in a large and well ventilated room, which should be kept only warm enough to be comfortable. The food should be mild, liquid and farinaceous; gruel of corn-meal will be found very agreeable to many; toast and water, and preparations of this character, are all that are demanded during the early stages. Later, beef tea, chicken broth, and other articles which are nutritious, but easy of digestion and assimilation, should constitute the diet. During the febrile stage, in addition to the solution of Chlorate of Potassa, already mentioned, a drink made of good vinegar one part, simple syrup four parts, and water ten to twenty parts, will be found both an agreeable beverage and an antiseptic remedy.

If the eyes become inflamed, they may generally be relieved by frequently washing in slippery-elm water, and the use of a lotion of infusion of Hydrastis Canadensis. Coryza may be relieved by washing the nostrils with soap-suds, slippery-elm water, or solution of alum, and occasionally by penciling with dilute solution of Nitrate of Silver.

When the ears are ulcerated, frequent washing of them with soap-suds, or some mild astringent or soothing lotion, is all that will generally be required.

During recovery, it is best for the patient to avoid any exposure for ten or fifteen days after desquamation occurs. If the precaution is not regarded, the occurrence of dropsy is very probable and dangerous. When dropsy occurs, it must be treated in the same manner as other cases of that disease in debilitated cases. It is always better to avoid, than to have to treat the sequelæ of scarlatina; hence special care should be taken during convalescence. The bowels should be kept regular, the skin moist and natural, and the secretion of urine normal. The diet should be strengthening, and frequently it will be necessary to give bitter tonics to re-establish the strength of the patient.

PART SECOND.

SELECTIONS.

Apocynum Cannabinum.—(Indian Hemp.)

Of the seventeen species of the genus *Apocynum*, the *Cannabinum* and *Androsæmifolium* are alone in medicinal use. These two strikingly resemble each other, though the leaves of the former are smooth, while those of the latter are pubescent; yet as many intermediate states occur, it is now considered that this difference of character does not amount to a specific distinction. They grow in similar situations, and flower about the same period.

The root is the only part which should be employed in medicine, and should be collected after the flowering season has passed and the tops begun to die; it is lactescent, and when fresh has an unpleasant, somewhat acrid, bitter taste, with a strong and disagreeable odor.

According to the analyses made by Drs. Griscom and Knapp, the root contains tannin, gallic acid, gum, resin, wax, fæcula, bitter principle or apocynin, coloring matter, lignin, extractive, etc.

Its action upon the human system is well marked and energetic. It is a tonic, alterative, powerful emeto-cathartic, diaphoretic, expectorant, inducing also a tendency to sleep, independent of the exhaustion consequent upon vomiting. The evacuations brought on by it are large, feculent, watery, and are succeeded by perspiration. It is a most powerful hydragogue cathartic and diuretic.

It acts so powerfully in draining the system, that Dr. Rush called it the "vegetable trocar." Dr. Valentine Mott used it in dropsy among his clinical patients. It is suited to tonic dropsy, being too active for cases of an atonic character, where iron is advisable.

Dr. Knapp gave it in intermittent fever, pneumonic affections, dysentery, and as an alterative in enteritis. It acts as a sternutatory, and the fresh juice has been employed as an external application in cutaneous affections. As a tonic, it is admirably calculated to improve the tone of the digestive apparatus, and through this medium produce a corresponding effect upon the general system. On this account, probably, it is used in a dinner pill of some celebrity.

"Professor Merrill related to his class a case of acites in a boy twelve years old, which was promptly relieved by this remedy, after every other treatment had failed, and the disease had progressed so far, in spite of them, that a time had been fixed for the operation of tapping. The extract was given, first, in doses of one grain, afterward increased to two grains, three times a day. The effects were, moderate catharsis of a bilious and feculent character, free diuresis, without being profuse, and copious perspiration. Great relief and relaxation of the abdomen were obtained in the first twenty-four hours, and in five days there was no hydropic condition remaining. After this, the remedy had to be discontinued, although useful as an aperient, because of the profuse diaphoresis caused by it."—*Memphis Med. Rec.*, '54.

The following extract is from the pen of Dr. Griscom:—"The Indian Hemp, when taken internally, appears to have four different and distinct operations upon the system: 1st, as an emetic; 2d, as a purgative; 3d, as a sudorific; 4th, as a diuretic. Each of these effects it produces almost invariably. Its first operation, when taken into the stomach, is that of producing nausea, if given in sufficient quantity (which need not be large), and if this is increased, vomiting will be the result. It very soon evinces its action upon the peristaltic motions of the prima via, by producing copious feculent and watery discharges, particularly the latter, which action, when once excited, is very easily continued by the occasional administration of a wine-glassful of the infusion. The next operation of this remedy is upon the skin, when it displays its sudorific properties often in a very remarkable manner. Copious perspiration almost invariably follows its exhibition, to which effect is, in a great measure, attributed by some, the powerful influence it exercises over the various forms of dropsy. The activity of its diuretic properties does not appear to be so great in many instances as in others. In some cases, the urinary secretion, although somewhat increased in quantity, is not such as to be commensurate with the effect produced on the disease by the exhibition of the medicine. In other instances, its diuretic operation has been more manifest, causing very profuse discharges of urine, and in a very short time relieving the overloaded tissues of their burden.

Dropsy is, I believe, the only morbid affection, for the relief of which the powers of the plant have been brought into successful requisition. Its very active and often violent operation, would seem, in a great measure, to preclude its use in diseases which are accompanied with much febrile excitement. Yet one might readily suppose that some of its particular properties might be very advantageously sought for in some diseases where much arterial excitement was not present, especially its emetic, sudorific, and cathartic properties, each of which operations might be separately obtained from giving it in well-regulated doses."

In the treatment of secondary syphilis, it will be found a valuable agent, and should be used with other articles. The following formula is recommended:—

Apocynin,
Stillingin,
Asclepin,
Helonin.

Its great success in the treatment of dropsy has suggested the following formula:—

Podophyllin,
Asclepidin,
Jalapin,
Apocynin,
Senecin.

In typhoid fever, during the convalescing stages, it is used in combination with hydrastis or gentian. The wine of apocynum is an excellent form for administering this remedy in cases of dropsy, in that while the apocynum is producing its peculiar effects, the wine both assists it by its tonic properties and keeps up the vigor of the system.

It enters into many of the valuable compounds used by physicians, and we doubt if once a practitioner is made acquainted with its properties, he will consent to abandon it use.—*Jour. Mat. Med.*

On the Prevention of Pitting in Confluent Small-Pox. By WILLIAM STOKES, M. D., Regius Professor of Physic in the University of Dublin.

The various modes previously employed, with a view of preventing pitting in cases of small-pox, may be thus enumerated:—

1. The puncture of the pustules when matured.

2. The application of the nitrate of silver.

3- The application of oil, or of the *linimentum calcis.*

4. The covering the face with a solution of gutta percha, with collodion, or with glycerine.

[The first of these modes is best adapted to a benign form of the disease, in which the pustules, though numerous, remain discrete for a longer period than in the severer cases. As to the second mode, Dr. Stokes has had no personal experience; it will be most suitable, like the last, in milder forms of the disease. The third form Dr. S. has tried, but does not consider either application of much value, though the linimentum calcis is preferable.]

During the past five years, I have used gutta percha and collodion in a considerable number of cases. These, however, were not by any means examples of the worst form of the disease. In most of them the crust came off in large flakes or patches, composed obviously of the dried exudations and the covering material, and leaving the skin uninjured. To render this treatment effective, at least so far as the exclusion of the air is concerned, it is necessary to renew the application at intervals of from twelve to twenty-four hours; for the covering seems to be repeatedly broken up by the advance of the eruption and the swelling of the parts. Some patients are greatly distressed by the feeling of constriction caused by the coating of gutta percha or collodion, and in general the treatment in question appears unadvisable where there is much vascularity, heat or swelling.

Looking at the frequency of pitting on the face, as compared with that of other parts of the surface, it is not easy to account for it, unless by referring to the fact that, while the rest of the surface is kept covered, and so not only comparatively excluded from the action of the air, but in a state of humidity, the integuments of the face remain in a dry and heated state—first, from the action of the external air, and next, from the increased vascular action. Hard and hot scabs are formed, and the ulcerative process makes its way downward to a greater or less degree. Some have held that the liability of the face to markings was to be explained by anatomical considerations. However this may be, it will be found that in cases in which from an early period certain portions of the face have been kept protected from the action of the air, and in a permanently moist state, pitting does not occur. This may be seen in cases of sthenic confluent small-pox, where, with the view of preventing the adhesion of the eyelids, poultices have been used over the eyes. In such cases it will be often found that every part of the face is marked, except those over which the little poultices had extended.

The application of poultices over the face appears to me to be the surest mode of preventing the consequent disfigurement. We should commence their use at the earliest period, and continue it to an advanced stage of the affection. In most cases they may be applied even over the nose, so as to cover the nostrils, for these passages are generally so obstructed as to be for the time useless to the patient. If the nostrils can be kept pervious by injections, the poultices need not be applied over their orifices.

If the chances of marking are in proportion to the activity of the cutaneous irritation, we may hold that this method should fulfill three important indications of treatment—

1. The exclusion of air.
2. The moderation of the local irritation; and,
3. The keeping of the parts in a permanently moist state, so as to prevent the drying and hardening of the scabs.

The value of this treatment, however, will, I feel convinced, be best seen in the inflammatory or sthenic form of the disease. The best poultice will be that formed of linseed meal, which should be spread on a soft material, such as French wadding, and covered with the gutta percha paper or oiled silk. I have never had occasion to repent the adoption of this practice.

[Dr. Stokes sums up his paper with the following conclusions:]—

1. That the chances of marking are much greater in the sthenic or inflammatory, than in the asthenic or typhoid confluent small-pox.

2. That considering the change in the character of the disease, both essential and local, observed during late years, we may explain the greater frequency of marking in former times.

3. That in the typhoid forms of the disease the treatment of

the surface by an artificial covering, such as gutta percha, or by glycerine, will often prove satisfactory.

4. That in the more active or non-typhoid forms, the use of constant poulticing, and of every other method that will lessen local inflammation, seems to be the best method of preventing the disfigurement of the face.—*Dublin Quarterly Journal.*—(*Braithwaite*).

Case of Traumatic Tetanus treated by Internal Use of Chloroform. By Dr. A. Dick, Buenos Ayres.

[The patient was a mulatto sailor, aged 32. Admitted into British Hospital, Bueuos Ayres, under Dr. Dick, Dec. 27, 1858, with two slight incised wounds, one in the scalp, the other in the hand, inflicted five days before. On Dec. 31, premonitory symptoms of tetanus appeared, which on the following day were more marked.]

Jan. 2.—All symptoms aggravated, and, in addition, frequent spasmodic attacks, amounting to opisthotonos. During Dr. Dick's visit, had three of these paroxysms, the least touch or breath of air serving to produce them; profuse perspirations. Ten drops of chloroform every twenty minutes. The patient being minus a tooth, it was administered through hiatus. Shortly after administration of chloroform the paroxysm ceased, but the tenseness and rigidity of cervical and abdominal muscles continued.

Jan. 3.—Pressure on abdomen did not produce spasms, which had previously been the case, and observed by Dr. Dick in all cases he has seen. Chloroform, gtt. xxx, every half hour; olei croton. tig. gtt. iv, his bowels not having been moved since 30th.

Jan. 4.—No paroxysms; muscles still hard and unyielding; quantity of dark fetid matter passed from bowels. Chloroform, gtt. xxx, as before.

Jan. 5.—Pulse less rapid; no paroxysms. Continue as before.

Jan. 6.—Id., id. Croton oil repeated. The same treatment continued up to night of 12th, *when the attendants having ne-*

glected to give chloroform, he had a very severe attack of eclampsia. Neglect being guarded against, he had no return.

Jan. 14.—Has slept for first time since invasion of the disease, and bowels begin to act naturally.

From this time the symptoms began to mitigate. He had less difficulty in swallowing; the cervical and masticatory muscles became slightly movable.

Jan. 23.—Pulse very weak. Expresses desire for animal food. Chloroform, gtt. xxx, every two hours, to be discontinued after midnight.

Jan. 30.—Muscular movements free and almost natural, save occasional convulsive twitch in wounded arm; speech not yet quite natural.

Feb. 10.—Still in hospital; weak, but otherwise in good health.—*Edin. Med. Journal, Jan.*

On Toxicology. By EDMUND W. DAVY, M.B., M.R.I.A., Etc.

In Toxicology much advance has been recently made. The cases of Palmer, Dove, and others, have been the means of directing public attention to that fearful and subtle poison, strychnine, of which but little was known prior to those criminal cases; and a great amount of knowledge has been gained as to the chemical and physiological properties of that most active poison. Many new and most delicate tests have been discovered which are found capable of detecting with certainty the most minute quantities of strychnine. I shall only refer to a few of the most characteristic.

One class of tests depends on the color produced by the action of different reagents on strychnine, and are therefore called the color tests; of these by far the most striking and delicate are bichromate of potash and the ferrocyanide of potassium, which in conjunction with strong sulphuric acid produce with strychnine a most beautiful purple coloration. The first was discovered by M. Lefort, and the latter by myself a short time ago; and they appear to be the most delicate tests of strychnine yet discovered. According to the experiments of Professors De Vry and Der Burg, of Rotterdam, on the comparative delicacy of different tests for strychnine, they state that those are the most sensitive, and that they were able by their means to detect the one-sixty-thousandth part of a grain of that alkaloid.

When search is made for the presence of strychnine in the contents of the stomach or in the different tissues or organs of the body, we are obliged to isolate or separate the strychnine from the various organic substances with which it must necessarily be mixed in such cases, previous to the application of these and other tests; and many different processes have been adopted for that purpose, the details of which would be out of place on the present occasion; but I may observe that very recently chloroform has been used to separate strychnine from organic matter, and it appears to be a very efficient substance for this purpose.

Professor J. E. Rodgers and Dr. Girdwood, of London, succeeded by the use of chloroform in detecting strychnine in the blood, liver, stomach, and tissues of animals which had been poisoned by that substance; and in one case, after the animal had been interred for a year; which latter is a most important fact, as it was an opinion very generally entertained, that strychnine underwent decomposition when it was taken up into the system, which was the reason why it could not be detected in the blood and different tissues after death, in several cases of undoubted poisoning with that alkaloid. From the experiments instituted by Professors De Vry and Der Burg, they are led to the following conclusions, which seem to be the most consistent with known facts, viz: that if death has been caused by strychnine, this poison can only be detected in the body provided it has been administered in a quantity more than sufficient to cause death; but that if the poisoning by strychnine has been chronic, and has resulted from a quantity not greater than just necessary to cause death, it can not be detected by a chemical examination of the stomach and intestines; and that it is probable that that part of the strychnine which has destroyed life is decomposed in the living body.

The only other test I shall call your attention to is the beautiful test of Dr. Marshall Hall, which that distinguished physiologist proposed a short time before his death. It consists in producing the peculiar physiological effects of strychnine in animals.

He selected for this purpose a frog, which he placed in a very dilute solution of strychnine, when after a short time it became tetanic and exhibited many of the effects peculiar to this poison.

This test is one of considerable delicacy, for Dr. Hall found that a frog placed in six drachms of water containing only the one-four-hundredth part of a grain of the acetate of strychnine became, after three hours and a half, violently tetanic, and in two other experiments, the one-five-hundredth, and even the one-thousandth part of a grain of strychnine were thus detected.

Dr. Harley, of University College, London, says, that he considers the physiological test the most reliable one for strychnine; and the method of applying it appears to be by injection into the thoracic or abdominal cavity. He further remarks, that when the poison reaches the lungs it seems to act most speedily; which is easily explained by the rapidity with which the poison will be absorbed into blood through the pulmonary capillaries. He found that a solution containing so small a quantity as the one-sixteen-thousandth part of a grain of the pure alkaloid, injected into the lungs of a small frog, caused it to become violently tetanic after nine minutes and a half, and to die in two hours.

Though the physiological test for strychnine is one of very great delicacy, particularly when applied as Dr. Harley recommends, still it is not, taken by itself, perfectly conclusive, at least in the case of frogs, which are now known to be tetanised by different causes unconnected with the presence of strychnine; there can, however, be no question that this test may often be used as a most valuable adjunct to the chemical tests, and more satisfactory evidence may be thus obtained as to the presence or absence of that poison in suspected cases.

I may observe in connection with this subject, that as a general rule, those substances which have been found to possess the most deleterious effects on man and animals, have by divine foresight been endowed with very marked and characteristic chemical properties, which enable us readily to distinguish and identify the presence of those bodies, as for example, arsenic, corrosive sublimate, prussic acid, and, as we have just seen, strychnine; and though no doubt there are many vegetable and animal poisons which appear to possess no decided chemical properties, yet there can be little doubt but that when they come to be more attentively studied, they will be found likewise to possess characteristic chemical effects by which they may be readily known. The identification of those substances which are destructive to human life, is of very great importance to society; and the public owe a deep debt of gratitude to chemists and other men of science, who have studied and made known the properties of many of those substances.

But to return to strychnine, the inquiries recently made in connection with this substance, have not only been the means by which different methods have been devised for the detection of the most minute quantities, but, likewise, several antidotes have been proposed, by which the poisonous effects of strychnine may be more or less destroyed.

One of the most remarkable substances as yet proposed as an antidote for strychnine is nicotine, the active principle of tobacco, which was suggested by Professor Haughton, F.T.C.D. Mr. Haughton was led to try the effects of nicotine as an antidote from the opposite physiological properties of that substance when compared with those of strychnine (the former producing relaxation, and the latter contraction of the muscles), and he conceived that it was possible, from their opposite effects, that they might mutually neutralize, as it were, each other's action. To determine this important question he instituted several interesting experiments on frogs, which he placed in different solutions of strychnine and of nicotine, and the results clearly show the correctness of his inference as to nicotine being more or less an antidote to strychnine.

These interesting results Mr. Haughton communicated to the Royal Irish Academy in 1856, and he has recently published them in a separate pamphlet, together with an interesting case of attempted suicidal poisoning with strychnine, which occurred in St. Louis, Missouri, United States, where, acting on the suggestion of Mr. Haughton, the individual was successfully treated with an infusion of tobacco.—*Braithwaite.*

On the Lineæ Albicantes in Puerperal Women.

Dr. Crede was induced to give the following results of his observations on this subject, in consequence of the (as he considered it) too indiscriminate statement made by Caspar, in his Handbook of Juridical Medicine. Dr. Crede states that the lineæ albicantes are formed in very different degrees in the majority of pregnant women, but very seldom observed during the first half of pregnancy, and often only during the last or the penultimate month. During his management of the obstetrical department of the Berlin Charite, and at the Leipsig Obstetrical School, he paid particular attention to the matter, and the general result was that these white cicatrix-like lines were observed in 90 per cent. of the cases examined; and they have very rarely ever been met with during the first half of pregnancy. They are generally disposed with some regularity, radiating from a mesial point that is placed about one or two inches below the umbilicus. With the expansion of the abdomen, the lines often become more irregular and unequal on the two sides.

After delivery they put on another appearance, but do not entirely disappear. The freshly-produced streaks, especially in primiparæ, are of a shining bright reddish appearance in women having fair or red hair, and brownish in those whose hair is darker. The redness is lost sometimes only a few days after delivery, leaving a dirty white appearance, accompanied by wrinkling of the skin. On the occurrence of a new pregnancy, however, or when the abdomen becomes distended from any cause, the streaks exhibit a shining whiteness, with here and there a brownish tinge.

In several instances no traces of these appearances are discernible, even after repeated pregnancies, and the result of Dr. Crede's most careful examination went to show that these lines were absent in 10 per cent. of the cases he examined expressly to ascertain the fact; of these cases, 7½ per cent. were primiparæ, and 2½ per cent. multiparæ.

These streaks are sometimes formed only during the second or third pregnancy, or new ones may become added to those already existing. This may be owing to the greater distension the abdomen has undergone in subsequent pregnancies. In general, it will be found that the woman in her first pregnancy was not strong, and had not carried her child to its full time. It is at all events common for a woman who has gone through a normal pregnancy, without these lines appearing, to have them manifest themselves on subsequent occasions; on the other hand, it is not uncommon for those who have aborted at the fifth or sixth month, to first exhibit them at the end of a subsequent pregnancy. That these marks, when once formed, ever disappear, Dr. Crede does not admit, and consequently denies the correctness of the statement that they are met with more abundantly in primiparæ than in multiparæ. They are only more plainly seen on account of their brighter color.

The lines may also appear as a consequence of various diseases which give rise to great and sudden distension of the walls of the abdomen; and this not only in aged women, but also in young persons who may very well become the subjects of juridical investigation.

Lines of exactly a similar appearance, which occur on the breasts, thighs, buttocks, or calves of the legs, equally deserve consideration with those observed upon the walls of the abdomen. Montgomery has especially dwelt upon the importance of the sign derived from the coincidence of the lines on the breasts and abdomen. Dr. Crede's observations have convinced him that their presence is of much seldomer occurrence on the breast and other parts named than on the abdomen.—*Monatschrift fur Geburtskunde*, Band xiv, 1859.

On Prostatorrhœa. By Professor Gross.

Dr. Gross believes that the affection which he thus designates has not received any attention from writers on surgery, it having been confounded with other lesions, such as gleet, chronic urethritis, seminal losses, or cystorrhœa. It is, however, a thin mucous discharge from the prostate dependent upon irritation, if not actual inflammation, of the component tissues of the gland. Dr. Gross has not met with it in the very young, although it may probably be present in cases in which the prostate suffers from reflected irritation, as in stone, prolapsus ani, or worms. After the twentieth year it becomes sufficiently common, and it is occasionally seen in the aged. It seems to be most frequently met with in persons of a sanguineo-nervous temperament, with strong sexual propensities leading to frequent venereal indulgence or to masturbation. The single and the married seem to be equally prone to it. The exciting causes are not always very evident, but in most of the author's cases the affection was traceable to venereal excesses, chronic inflammation of the neck of the bladder, stricture, or other disease of the urethra, while in some cases it depended upon affections of the lower bowel. It may be occasionally excited temporarily by the exhibition of certain internal remedies, as drastics, cantharides, or turpentine. Many of the most obstinate cases that have come under the author's notice have been the direct results of masturbation. The discharge is in general perfectly clear, and more or less ropy, and it may vary in quantity from a few drops to a drachm and more in the twenty-four hours. It is very rarely puriform. The most copious discharges usually take place while at stool. There is often a peculiar ticklish sensation, spreading from the region of the prostate along the urethra. There may be more or less uneasiness in voiding urine, and a frequent desire to pass it, while some patients are tormented with morbid erections. The patient's mind often suffers much from the alarm which the discharge gives him, owing to his fears of its leading to impotence. In some instances all business habits become destroyed, the patient incessantly dwelling upon his complaint.

From urethritis, whether common or specific, it may usually be distinguished by its history, the nature of the discharge, and the attendant phenomena. It usually comes on gradually, and there is seldom any evidence of inflammation. The diagnosis in gleet is sometimes more difficult; but beside the history of the case, the discharge is in gleet usually puriform and more abundant. Many patients confound the discharge with a flow of semen, and the ignorance of their attendants often encourages the error. According to Dr. Gross' experience, diurnal spermatic emissions are amongst the rarest occurrences met with in practice; and the discharges, said to be semen, forced out while at stool, are usually simply prostatic. In cystorrh there is an inordinate secretion of mucus, associated in nearly all cases with an altered condition of the urine, frequent and difficult micturition, and more or less pain, together with constitutional disturbance. In prostatorrhœa there may also be more or less uneasiness low down in the pelvis, with trouble in voiding the urine, especially where the prostate is much enlarged; but the two disorders are so widely different that it is impossible to confound them. Although the disease is probably of a true inflammatory nature, there are cases, and these by no means uncommon, in which the gland is to all appearance entirely healthy. "The discharge in such seems to be solely the result of a hightened functional activity, probably connected with, if not dependent upon, disorder of the seminal vesicles, the urethra, neck of the bladder, or recto-anal structures; in other words, upon reflected irritation, or, as our professional forefathers would have denominated it, "sympathetic disturbance." The prognosis is generally favorable, but the obstinacy of the affection is often very great; "and hence the surgeon should always be guarded in the expression of his opinion respecting a rapid cure. When the mind deeply sympathizes with the local affection, as is so frequently the case, especially in young men of a nervous, irritable temperament, there is no disease which, according to my experience, is more difficult of management, or more likely to result in vexation and disappointment."

In treating the affection, we must make a thorough exploration of the genito-urinary apparatus and of the rectum, by means of the catheter and the finger introduced *per anum.* This last is of great importance in order to render the examination satisfactory. If disease of the seminal vesicles exist, it will usually be evinced by tenderness on pressure through the wall of the bowel, provided the finger is sufficiently long, or the prostate is not too voluminous. The habits of the patient, too, must be well inquired into, as sexual excesses keeping the prostate, vesicles, and adjoining structures in a state of continual excitement, are very likely to give rise to prostatorrhœa. Having ascertained the local and general condition of the patient, our means of treatment must be in part directed to the system at large, and in part to the structures themselves. In many cases, the enfeebled state of the patient indicates the propriety of giving tonics and a nutritious diet. One of the best preparations of iron is the tincture of the chloride in union with that of nux vomica, in the proportion of twenty drops of the former to ten drops of the latter four times a day. If the patient be plethoric, we may with great advantage give small doses of tartar emetic, care being taken not to nauseate. In all cases it is of importance to maintain the secretions in an orderly state, drastics being avoided. Condiments and high-seasoned dishes should be abstained from. Among the more important tropical remedies are—first, moderate sexual intercourse, as a means of allaying undue excitement; and next, cooling and anodyne injections, or weak solutions of nitrate of silver and laudanum. The author generally prefers Goulard's extract with wine of opium, in the proportion of from one to two drachms of each to ten ounces of water, thrown in forcibly with a large syringe three times a day, and retained for three or four minutes. In obstinate cases, cauterization of the prostatic portion, or even the whole length of the urethra, may be required once a week. The cold hip-bath should be used twice in twenty-four hours, the lower bowel kept cool and empty; and if the disease do not gradually yield, leeches should be applied to the perinæum and around the anus. Whatever plan be tried, perseverance and occasional change of remedies are indispensable; and when the mind has become deeply involved in the contemplation of the case, it becomes almost impossible to convince the patient he is well, or that nothing serious is the matter. Our chief dependence then should be placed on travel, and entire change of scene and occupation. If the patient be single, he should be enjoined to marry.

[It is never necessary to give tartar emetic. An irritating plaster should be placed on the perinæum.—Eds.]

On Epilepsy. By Isaac Pidduck, M.D., London.

[Dr. Pidduck remarks that morbid anatomy failing us in our study of this disease, we are driven to a careful study of its symptoms, in order to arrive at a successful mode of treatment.

The subjects of idiopathic epilepsy are for the most part remarkable "for the large size and high temperature of the head."]

The symptoms of epilepsy are those of a sudden explosion of accumulated nervous energy. From the periodical recurrence of the fits in many cases, it is inferred that the accumulation of nervous energy (*dyamis neurotica*) goes on for a definite time in the brain and spinal cord, till at length an explosion ensues upon the muscles of voluntary motion, which are thrown into violent action, and by this means the accumulation is exhausted. This explosion is followed by languor, and frequently by a state of coma, or prolonged sleep—indubitable signs of exhausted nervous energy.

There are two modes of preventing this gradual accumulation and sudden explosion of nervous energy, constituting the fits of epilepsy—viz: the natural and the artificial. The artificial is by the use of those medicinal agents which keep up a constant involuntary action of the voluntary muscles, such as strychnia internally, and electro-galvanism externally. The natural mode is by the constant exercise of the voluntary muscles. By these means the recurrence of epileptic fits may be deferred almost for an indefinite period—the next best thing to a cure. To the artificial mode there must, of course, be a limit; but not to the natural. By cold affusion over the head daily, to diminish its heat, and by the administration of strychnia, so as to produce a decided twitching of the muscles, the fits, of monthly, weekly, daily, and hourly reccurrence, have been deferred for several months, and the same favorable result has been obtained by electro-galvanism..

But the most permanent benefit has been obtained by the natural method, which is the safest and best. In proof of the accuracy of this theory and the success of the practice, the cases of three of the greatest generals that ever lived might be adduced—Julius Cæsar, Napoleon, and the Duke of Wellington. It was in the later periods of their lives, after their active career was ended, that these giants of nervous energy became the subjects of epilepsy. In the case af our own great Duke, the recurrence of the fits was prevented by his temperance in living, by the activity and simplicity of his habits, by the multiplicity of his avocations, and by the hardihood of his amusements and pursuits.

The example of the Duke of Wellington is proposed for the imitation of epileptics who are desirous of enjoying immunity from the fits, in preference of all artificial modes of cure. The confinement of insane epileptics in asylums, though in many cases necessary for the sake of others, is highly prejudicial to the patients themselves (unless accompanied by hard labor), as leading to a life of inactivity, which favors the recurrence of the fits. That the cerebral disease found in some cases after death is the effect, and not the cause, of the paroxysms, there is little doubt. It is upon the principle of rousing the dormant nervous energy, and promoting its expenditure, that some of the remedies said to be successful in the cure of epilepsy have operated, such as drinking the warm blood of a slain gladiator—a miserable remedy, only rendered tolerable by a more miserable disease — being stroked by the hand of a criminal immediately after execution, swallowing live spiders, etc.

Upon the same principle, paroxysms of hysteria, which, in some cases, so closely resemble those of epilepsy as with difficulty to be diagnosed, are frequently prevented—namely, by making an impression upon the nervous system through the medium of the mind or body, by which the patient is roused into activity and consequent expenditure of the nervous energy.

As strychnia is advised for a remedy in epilepsy, it may be a safeguard against its poisonous operation in an overdose, to mention that camphor is the appropriate antidote to this poison. The fact was communicated by the writer in an article published in the "Lancet." He is induced to mention it again in consequence of a case of poisoning by nux vomica, recorded in that journal for Oct. 22d, commencing with this statement: "Nux vomica is one of those poisonous substances for which we unfortunately possess no antidote;" and, again, speaking of poisoning by strychnia—"There is no remedy for it." Camphor, in five-grain doses, dissolved in mucilage, puts a stop to the tetanic spasms, and gives time for the action of the stomach-pump or emetics, if there is reason to believe that any of the poison is retained.—*Lancet.*

PART FOURTH.

EDITORIAL.

OUR JOURNAL—ITS PROSPECTS.

As this number completes the present volume, we take the opportunity of saying a word to our friends and patrons relative to our Journal and its prospects for the coming year.

How well we have complied with our promises, and how satisfactory we have made the Journal to our many readers, we leave them to judge. We are confident that we have spared no labor or expense in making it both neat and readable, and issue this, the last number of the year, with a *mens sibi conscia recti*, with a conviction that we have faithfully discharged our duty, and have furnished material well worth the amount paid for it, and which could have been obtained nowhere else. Of course we do not think that we have succeeded in presenting a journal exactly suited to the taste of every individual reader—such would be an impossibility; but that the majority has been pleased and contented with our efforts, we feel assured from the numerous commendatory letters which are constantly coming in to cheer us in our labors to do good, and to disseminate the grand truths of Eclectic practice.

One thing, however, is evident to every sane mind, to-wit: A journal can not be continued without money—the printer must be paid, and we are responsible. Although we established the rule that the Journal must be paid for in advance, yet we were induced to be lenient to some of our subscribers, resting upon their promise to pay some time during the course of the year. In looking over our books we find that quite a number on whose assurances we relied, are still in arrears. We hope that all who are yet in our debt will forward their dues as soon as possible. Those who have not paid for this year, will not have the January number for '61 sent them. Such as have already settled for '60 will have the next number forwarded as usual; and we hope they will make arrangements to settle as early as possible. If any desire the Journal stopped, they will confer a favor by notifying us at once.

The Journal for the coming year will he continued upon the same terms and under the same control as heretofore, except that Prof. J. M. SCUDDER will be associated with us as assistant editor. Dr. Scudder, as author of a work on "Diseases of Women," and with Dr. Jones, on Materia Medica, is too well known to the profession to require a word in reference to his ability as a writer and investigator; and his association with us will no doubt be gratifying to his numerous friends. By our mutual efforts, and the able contributions which we have hitherto received, and will continue to receive from the members of the Faculty, we can safely predict that the Journal for the coming year will occupy a position second to no medical periodical in the country in point of practical usefulness to the practitioner of medicine.

Before closing, we take the opportunity to announce that in the next volume will appear a series of articles on the *concentrated medicines*. The process of their manufacture is not yet perfect. Improvements are now being made. Dr. T. L. A. Greve has recently extracted a *hydrastine* which retains all the medicinal properties of the root, and is *perfectly soluble in alcohol and water*. This is a great improvement on the old.

In the series of articles we promise, we shall keep our readers advised of the result of all late experimental investigations, and shall aim to give the precise disease in which each remedy is of paramount importance, derived from careful clinical observation.

In concluding, our friends will please accept our thanks for their patronage, and if they are pleased to continue it for the coming year, they will find the Journal to be, as it always has been, a bold and unflinching champion of Eclecticism in its purity.

CAUSE OF DRUNKENNESS AND CRIME.

Drunkenness and crime are twin sisters; they go hand in hand. Why are they so common, and why are they yearly increasing? If the matter be carefully investigated, it will be found that parents are planting the seeds of vice with the diet of their children. Fathers and mothers who feed their babes on *tea* and *coffee*, scarcely imagine that they are fixing in the fertile soil of the infant constitution the root of a moral Upas tree, that is in after years to develop and poison the springs of truth and honesty. But so it is. Tea and coffee are stimulants. The nervous systems of children are extremely susceptible to the influence of such agents. Let a cup of coffee be given in the evening to a child unaccustomed to it, and sleep is banished from his eyelids; he romps and plays, is bright, joyous and happy. If the practice be continued for a time, the same quantity will have no effect, the nervous system accustoming itself to the stimulant. If the same degree of exhilaration is desired, more must be taken. A *necessity* for stimulation is thus early fixed, and grows apace with the physical development, and when, as years roll round and maturity is attained, tea and coffee are not sufficient to satisfy the craving, resort is had to the wine-cup. Debauchery and crime are the result; and the baby coffee-drinker ends his career at the gallows, or pours out the bitter lamentations of his soul to deaf prison walls and iron grates.

Physicians should warn parents of the evils—physical as well as moral—that may result from the practice of feeding infants on tea and coffee.

SUITS FOR MAL-PRACTICE.

Dr. J. L. WILSON, of Selma, O., replies as follows to a letter of inquiry relative to the termination of a suit for mal-practice, instituted against him some time ago:—

"After a lapse of two years, having subjected me to the expense, loss of time, etc., of taking an almost innumerable mass of depositions in your city, Cleveland, etc., and having resisted all our efforts to obtain a trial, they have, at our present session of Court, *withdrawn the suit;* hence, a prosecution commenced in malice and hope of revenue, has vanished in smoke!"

Unfortunately for the good of mankind, cases of mal-practice are too common in our courts of law. The surgeon in the pursuit of his business, is beset by dangers on all hands. The profession is full of ignorant, envious, malicious men, who are ever on the watch to instigate persecution, where a stiffened joint or crooked limb is seen, no matter what the nature of the accident may have been, or the amount of skill or care displayed in its treatment. Many of these *quasi*-surgeons, who have never had a case themselves, assume that every fracture or dislocation should terminate without deformity. The unfortunate patient is so informed, and the hope of gain incites him to let loose the blood-hounds of law against the surgeon. If the case should terminate in favor of the defendant, he is at least subjected to great expense, loss of time, and annoyance, in his defense. So common are these civil suits for damages becoming, that many of our best qualified medical men entirely refuse to attend any surgical cases, especially if they should own property. They say the recompense is not sufficient to justify their incurring the risk of a suit for mal-practice.

This condition of things is greatly to be deplored, and the fault, to a great extent, lies with physicians themselves, who neglect the study of medical jurisprudence, and often wrongly advise through sheer ignorance. Writers on surgery, and professors of surgery in the various schools, are too prone to teach that perfect results should follow, in the treatment of fractures and dislocations. It may surprise some to learn that Prof. F. H. Hamilton, in his able "Reports of Cases of Deformities after Fracture," a digest of which is to be found in Elwell's admirable work on "Mal-Practice and Medical Evidence," states "that in fractures of the tibia and fibula, both compound and simple, perfect results are in the proportion only of one to about three of the cases treated, and in fractures of the femur and clavicle, complete cure results in about one case in five; in fractures of the patella, a perfect cure happens only in one case in six." If physicians and attorneys, as a general thing, understood that it is the rule for deformities to result frequently, even under the most favorable circumstances, there would be much less litigation on this subject.

There are many medical men, however, who are always ready, for a paltry pittance, or to gratify envy and malice, to swear against what they know is true, in favor of plaintiffs in civil suits for damages. Such a course, prompted by such motives, can not be too forcibly denounced, or held in too great contempt by honorable physicians. Such ignoble, base, envious, malicious men should be ostracised by the profession, and consigned to the shades of infamy and dishonor. We hope to see the day when more attention will be paid to the study of medical jurisprudence by both lawyers and doctors. Then, and not till then, will intelligent surgeons enjoy the proper immunities from prosecutions, incited by malice or love of gain.

DEATHS FROM CHLOROFORM.

The report of a death from the administration of chloroform by a physician in this city, appeared in a recent issue of the "Lancet and Observer;" and we find that another accident of the same nature has occurred lately in Bellevue Hospital, an account of which is contained in the American Medical Gazette. We are always surprised to hear of these misfortunes, and are constrained to entertain the opinion—based on ample experience — that chloroform, when carefully and properly given, is a safe and reliable agent. It ought always to be freely mixed with air, and the pulse and respiration should be attentively watched. We are extremely partial to this agent, and do not care to see the people alarmed by these frequent accounts of death from its use, when we firmly believe that accident will not follow once in a million times, if properly administered.

A REQUEST.

We are solicited by a subscriber to request of Dr. M. F. Williamson, that "he give us the mode of attack, symptoms, duration, and sequelæ of the disease he calls Diphtheria, and has treated so successfully."

Dr. Williamson will do us a favor by complying with the above.

ANOTHER ECLECTIC DRUG STORE.

The Drug Store on the corner of Sixth and John streets, formerly owned by John Dickson, has lately been bought by Dr. T. L. A. Greve, who is immediately going into the manufacture of Concentrated Medicines. We hail it as a good omen to see new laboratories of this kind being established. It shows what a demand there is for Eclectic preparations, and how well they are appreciated by the profession at large. We call attention to Dr. Greve's advertisement, to be found on the third page of cover. His *soluble hydrastine* we have tested, and can recommend as a superior article, especially in diseases of the mucous membranes.

In reply to numerous correspondents relative to my Dispensatory, I will now say that when the work is again revised by me, I shall give the various formulæ for the Pharmaceutical preparations in *parts*, instead of in weights and measures, as now given, which will materially facilitate the operations of Pharmaceutists.

JOHN KING, M. D.,
Author of American Dispensatory.

Cincinnati, Oct. 29, '60.

BOOK AND JOURNAL NOTICES.

American Journal of Indigenous Materia Medica and Repertory of Medical Science. Conducted by B. Keith, M. D. $1 per annum.

The above is the title of a journal just started by Dr. Keith, of New York, the first number of which lies before us. Its object is to bring prominently before the profession the Materia Medica of our own country. This number contains many articles of interest, and the Journal bids fair to be instructive and entertaining. We wish its editor all success.

Braithwaite's Retrospect of Practical Medicine and Surgery. New York: W. A. Townsend & Co.

The last half-yearly of this most excellent repository of medical science, is, as usual, replete with matter of the greatest practical utility to the physician. Every medical man should be a subscriber.

EDITORIAL ABSTRACTS AND CLIPPINGS.

Bismuth in Gleet and Leucorrhœa.—M. Gaby, of Paris, says:—Repeated trials have convinced me that injections of oxyde of bismuth constitute the very best treatment of gleety discharges. Thirty parts are suspended in two hundred of rose water, and so injected as to leave as large a deposit of the salt as possible in the canal. Three injections per day should be employed at first, and then fewer. He has collected forty-three cases thus treated with success, five of which he briefly relates. Urethral discharges, unconnected with gonorrhœa, as observed in certain diathesis, in masturbation, venereal excesses, etc., and increasing in quantity, even after pure connection, have been successfully treated by this means in three instances.

Balanitis and balanoposthitis, and herpes præputialis yield rapidly to bismuth, applied in powder, after cleansing the part, and then covering with cotton. The various forms of vulvar leucorrhœa may be treated with bismuth. (One of these is entirely confined to the vulva, whether appearing as a consequence of follicular vulvitis, or without previous inflammatory symptoms. The latter is often met with in little girls.) Pregnancy, want of cleanliness, masturbation, worms, or contusion, are among the exciting causes. After removing all complication, the bismuth acts upon the discharge like a specific.

In the leucorrhœa of girls, powdering with bismuth is an excellent remedy. In ordinary vaginal leucorrhœa, occurring in women otherwise healthy, and having no other disease of the genito-urinary organs, the bismuth succeeds well.

Urethra-vaginal leucorrhœa, is almost always of infectious origin. In several instances reported, it yielded to bismuth after obstinately resisting other remedies. It is to be remembered that all the cases in which bismuth is useful are of the chronic description, and that pain and other signs of acute inflammation, contra-indicate its employment.—*North American Medical Reporter.*

A New Mode of making Pressure in Popliteal Aneurism By Dr. MOFFATT.—Dr. Moffatt thus describes an apparatus for making compression in a popliteal aneurism, which is a modification of one already employed by Dr. Fountain:—"In a few minutes, with the aid of a carpenter, we erected a structure consisting of a stick of timber about four inches in thickness by eight in width, one end of which was secured to the top by an upright post of the same dimensions. This post was fastened firmly to the floor, and lashed to the iron cross-bar at the head of the bed. It was about six feet in hight, and beveled at the top to receive the stick first named, these being firmly nailed together. The large piece of timber, about twelve feet in length, rested at the lower end upon a strong table placed at the foot of the bed, thus forming an inclined plane over the bedstead placed lengthwise beneath it. The patient was then placed upon the bed in the supine position, with his leg slightly flexed, somewhat everted, wrapped in thick layers of cotton, and placed in a long fracture box. A compress made of adhesive plaster wound tightly into a roll about an inch in length and three-eighths of an inch in diameter, was then placed over the femoral at the inferior angle of Scarpa's space. Upon this rested the lower end of a perpendicular piece of wood, about an inch square, the upper end of which was beveled to meet the inclined plane before described. The pressure was commenced at eight in the morning. Its degree was regulated by drawing the upper end of the perpendicular down to the inclined plane, to a greater or less extent, as might be required. The hand of the operator was kept upon the stick, and thus secured an equable pressure, even though the patient moved his limb, as he sometimes did a very little. A second compress and upright were placed over the artery as it crosses the horizontal ramus of the pubes, and when the pain from pressure on one was too great to be borne comfortably, the other was used; and thus alternately pressure was kept up until five in the evening, when pulsation could no longer be felt in the tumor. Moderate compression was kept up for eight hours longer, after which the patient was kept for several days quietly on his bed. The great simplicity of this plan of compression, which is always available, must be palpable to every one. That it is far easier for the patient, and unspeakably more so for the operator, can not be questioned. It would also seem reasonable to infer, that the compression itself, made but at one point, is more uniform and certain than has yet been secured by any other method."

Braithwaite.

Chloroform as an Antidote to Strychnia.—Dr. J. R. Smith records the annexed details:—In November, 1857, a young man of the name of Reardon was supposed to have been frozen. Dr. Smith, on being called, discovered symptoms of poisoning by strychnia. The muscles were powerfully contracted, the limbs stiffened, the jaw locked, respiration difficult, and the pulse small and frequent. The severity of the symptoms induced him to think it impossible the man could recover. The first remedy which suggested itself as the best was chloroform, and he administered it by inhalation sufficiently to relax the muscles to admit of easy flexion of the legs and arms; respiration then became quite natural, the pulse less frequent and more perceptible. The chloroform was then withdrawn till the tetanic symptoms returned, and again applied and alternately withheld till the effects of the strychnia passed away, which was about ten hours. Dr. Smith first saw the patient at nine o'clock in the evening. At seven next morning consciousness returned, and the chloroform was then withheld. An emetic was given, afterward a purgative, and the man became gradually convalescent, his appetite and strength returning, till two days afterward, when symptoms of strychnine poisoning again appeared, but were not alarming. After this, recovery was very rapid. This man is now a soldier in the Canadian 100th regiment. Twenty-four ounces of chloroform were used, though no doubt much was lost on the sponge; the chloroform was used in such doses as to produce a slight relaxation of the inferior maxillary, and easy flexion of the upper and lower extremities. It appears from the statement of the man himself, that he was a hunter, and used strychnia in destroying wolves and foxes, and in a temporary fit of madness from the use of spirits took a dose of the poison himself in a glass of liquor. A small vial containing strychnia was found on his person.—*American Journal of Medical Sciences.*

On the Employment of Iodide of Ammonium in Constitutional Syphilis.—Dr. Gamberini, of Bologna, relates fourteen cases treated by iodide of ammonium, and he draws the conclusion that this agent is a prompt and efficacious remedy in all those cases in which the iodides of potassium and sodium are usually employed. He considers the iodide of ammonium to be preferable to the other iodides, because, while effecting the same results, it has the advantage of acting more rapidly, and also because strong doses of iodide of potassium or sodium are required to obtain results which are secured by a very small dose of iodide of ammonium. The terminal dose of the latter being the same as the commencing dose of the other iodides, the expense of treatment is very considerably reduced.

On the Therapeutical Properties of the Bromide of Potassium.—According to the researches of M. Huette, the administration of the bromide of potassium produces prostration of strength, difficulty in moving, diminution of general sensibility, anæsthesia of the mucous membrane of the palate and larynx, and more or less torpor of the genital organs. M. Thielmann has employed this salt successfully in the treatment of painful erections, satyriasis, and spermatorrhœa. Dr. Pfeiffer has obtained the same results, and has used the bromide in abnormal erections, neuralgia of the neck of the bladder, catarrh of the urinary passages, and gravel. The efficacy of the mineral water of Kreuznach in the latter affections is due to the large quantity of bromide of potassium in the dose of fifty centigrammes, raising it progressively to two or three grammes (℈ ss to three fourths of a drachm); he gives it in two doses' night and morning, or in doses otherwise divided to suit particular constitutions.

On the Use of Tannin in large doses in Albuminous Anasarca.—A case is recorded in which the use of tannin appears to have been attended with favorable results in the removal of anasarca. The patient was in an advanced stage of the disease, the face and whole body being anasarcous, and the urine being loaded with albumen. Small doses of tannin and tonics were employed without effect, and the patient fell into a semi-comitose condition, with slight convulsive movements of the lower limbs, and dilatation of the pupils. The tannin was again employed in the dose of half a drachm, and under its use the anasarca gradually disappeared, the patient regained his consciousness, and eventually he entirely recovered.

On the Efficacy of Digitalis and Quinine in the Treatment of Hemicrania.—Dr. Debout, who has very severely suffered for many years from attacks of hemicrania, testifies to the efficacy of the combined use of sulphate of quinine and powder of digitalis in the treatment of this complaint. The proportions employed are three grammes (about three fourths of a drachm) of sulphate of quinine, and one and a half gramme of powdered digitalis, made into thirty pills, of which one is to be taken every night at bedtime for at least three months. From the beneficial effects produced on himself, Dr. Debout prescribed the same treatment for several patients, and the results, in many cases, were equally satisfactory.

False Membrane in Diphtheria.—In several good cases Dr. Beale could find no traces of fungi. In one specimen in which vegetable organisms were discovered, they were proved to be of accidental presence. The membrane seemed to be delicately fibrillated in its entire thickness, and contained a number of small faintly-granular corpuscles. In some cases the membrane was quite composed of cells, which closely agreed in character with pus-corpuscles.

Several interesting cases illustrating the general and minute structure of the diphtheric membrane may be seen in the last volume (No. x.) of the "Transactions of the Pathological Society."

Tartro-Citric Lemonade.—(*Liquor Sodæ Tartras.*) By Prof. J. LAWRENCE SMITH.—There is nothing new in the use of tartrate of soda as a purgative, and it is only surprising, that once known, it ever gave place to the citrate of magnesia, to which there are several objections well known to practitioners. Among these I would enumerate the not unfrequent irregularity of its operations, sometimes not acting as promptly as desired, at other times with too great and continued energy, requiring anodynes to arrest its operation. Again, owing to the manner in which it is made, and the want of uniformity in the composition of the commercial carbonate and calcined magnesia, the amount of free acid in the solution varies much, when made at different times by different operators, and with different lots of materials. There being sometimes two or three drachms of free acid present in a bottle, and beside, under all circumstances, the mixture must be quite acid in order to retain for any length of time the citrate of magnesia in solution. Mitscherlich and Bence Jones have both made experiments on citric acid, and they consider it a poison analogous to oxalic acid.

Yet another objection to citrate of magnesia is the certainty of its undergoing decomposition, resulting in the deposition of an insoluble citrate of magnesia, a change that takes place very rapidly when the bottle is opened.

With these facts before me, I compounded a preparation of tartrate of soda with lemon syrup and water, (at first I introduced a small portion of citric acid, calling the mixture Tartro-Citric Lemonade.)

It is free from the objections of the citrate of magnesia, is a prompt and certain purgative, without excessive action, and uniform in composition, does not undergo decomposition even after the bottle is opened, even more agreeable to the taste and less costly than citrate of magnesia. It was first manufactured by T. E. Jenkins & Co., and is now also manufactured to a large extent at the Louisville Chemical Works.

The formula adopted by Messrs. T. E. Jenkins & Co., at the Louisville Chemical Works, which is under my direction, is—

Sal Soda,		21 lbs. 14 oz.	avoirdupois.
Tartaric Acid,		15 lbs.	"
Sugar (white),		24 lbs.	"
Water	to make	25 gals.	"

It is then put into strong twelve ounce bottles, and thirty-five grains of bicarbonate of soda added to each bottle, and immediately corked and fastened by twine or wire.

This preparation has been used in Louisville for about six years, and is gradually extending over various parts of the West and South. Wherever it has once got into use, it has never been abandoned, and the names of hundreds of physicians could be obtained, certifying to its utility and preference over the citrate of magnesia. I think that it would be well for our Pharmacopœia to adopt it.—*Jour. of Pharmacy.*

Iodohydrate of Ammonia in Constitutional Syphilis.—Prof Gamberini deduces the following conclusions from fourteen cases:—1. Iodide of ammonia and the iodohydrate of ammonia are indicated in the same cases of syphilitic diseases as the iodide of potas. 2. The treatment from the employment of this remedy in increasing doses from 10 to 80 centigrammes daily, in from 100 to 180 grammes of some liquid, has lasted from 14 to 35 days, averaging 21 days. 3. A sensation of burning or heat in the throat and stomach of some patients forced us to suspend temporarily the iodide, as well as to lessen the dose. 4. A liniment, composed of the same remedy, with olive oil, 15 centigrammes of the former, and 30 centigrammes of the latter, has assisted in curing the osteocopic pains. 5. Syphilitic accidents cured by iodide of ammonia have been cases of arthralgia, rheumatic neuralgia, periostosis, gangilionic enlargements of the groins and neck, and a papulo-vesicular eruption of the back. The process of making this medicine is very simple. It is that of Ruspini, consisting in precipitating a solution of the iodide of iron by carbonate of ammonia, filtering the solution, which is then to be evaporated promptly, until a pellicle is formed, and then crystallize. This salt crystallizes in cubes, and is very soluble in water. Its taste is not very disagreeable, being a little more bitter than iodide of potas.

Chloride of Zinc Moulded into Sticks for the purpyse of Cauterization.—Soften gutta-percha in boiling alcohol, and incorporate it with finely pulverized chloride of lime in a warm porcelain mortar, taking equal parts of each. Then roll rapidly on a porphyry slab, to the diameter of a quill, and divide in fragments, each of which shall be pointed at one end. Keep these in a wide-mouthed bottle in powdered lime. These sticks remain perfectly hard, are easily handled, cauterize with great regularity, and act as a sponge through which the chloride wil slowly exude, becoming liquid by the action of the air and the skin.—*Lancet.*

Myrzino Africana—A New Remedy for Tænia.—At the last stated meeting of the New York Academy of Medicine, I presented a specimen of the *Merzina Africana*, from Absynnia, where it is extensively used for the expulsion of tænia lata. I know nothing of the description of the plant; the pulverized seed is the part used, in doses of one third to one dram, administered in the morning, an hour or two before the usual time for the evacuation of the bowels. On the previous evening, beef tea, thickened with flour, is given; and in one hour after, a full dose of castor oil. The seed must be powdered, and mixed with water. The Academy ordered its reference to the section on materia medica, in order that its properties mght be tested. JOHN G. ADAMS, M. D.

Bridgeport, Sept. 25th, 1860.

Bodies resembling Spermatozoa from the Urine of a Woman.—These bodies were found by Dr. Beale in the urine of a patient of Mr. Cæsar Hawkins', in St. George's Hospital. Many of the organisms were exactly like spermatozoa, and might certainly have been mistaken for them; but on examination of a number of specimens, it became evident that they were really vegetable organisms. This fact is one of great interest and importance with reference to questions of supposed rape. Dr. Beale had never before met with structures liable to be mistaken for spermatozoa.

New Mode of Applying Chloroform in Neuralgia.—By Mr. LITTLE.—From observing that the lips of the patients were particularly blistered after inhaling chloroform, Mr. Little was led to try the effects of this agent, when applied locally. He first covered it with oiled silk and gutta-percha, but without success. He then used a watch glass to cover the lint soaked in it, with the best effect. He has thus applied it in neuralgias of the face, angina pectoris, lumbago, dysmenhorrhœa, and allied affections.—*Edinburgh Medical Joarnal, April*, 1860.

M. Chassaignac recently punctured a carotid aneurism, mistaking it for an abscess, and was then compelled to ligate the common carotid, which he did with success. The patient has recovered, with no bad symptoms.

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